CRITICAL

THINKING

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Chapter 1

Introduction to Critical Thinking

After reading this chapter, students should be able to do the following:

1. Define critical thinking.

2. Discover assumptions and biases.

3. Practice problem solving and decision-making.

4. Evaluate information.

Thinking about thought

Where are you now?

Assess your present knowledge and attitudes by deciding yes, unsure, or no for the following statements:

1. I am a good problem solver.
2. I am considered creative by my friends.
3. I have good judgment.
4. I find it easy to make decisions quickly.
5. My decisions usually turn out to be good decisions.
6. I like to think things through before speaking.
7. I am not shy about asking questions when I don't understand something.
8. I enjoy good discussions and arguments.
9. I regularly practice an art form (music, acting, painting, etc.)
10. I enjoy hearing other people's points of view, even when I disagree with them.
11. I usually question information presented as fact on the Internet or television.

Where do you want to go?

Think about how you answered the preceding questions. Be honest with yourself. On a scale of 1 to 10, how would you rate your level of thinking skills at this time?

Poor thinking skills Excellent thinking skills

1 2 3 4 5 6 7 8 9 10

Assignment 1a

In the following list, choose the three most important areas in which you think you can improve.

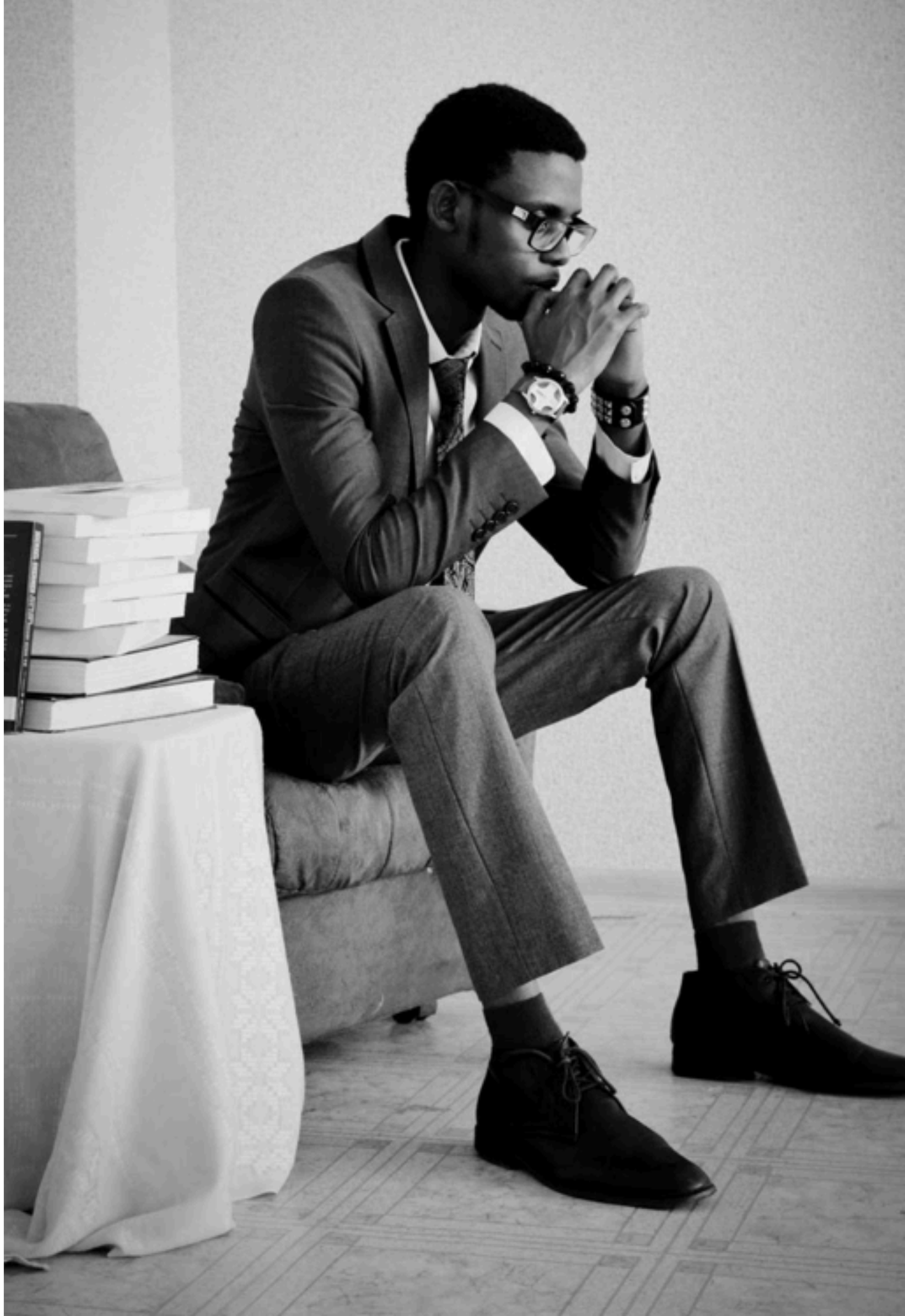
Next, submit your answers to Activity 1a in Canvas under Reading Assignment 1.

- Applying information
- Analyzing information
- Thinking critically
- Asking questions about information
- Evaluating information
- Coming up with new ideas
- Solving problems
- Making decisions
- Identifying weaknesses in ideas

How to get there

Here is what we will work on in this chapter:

- Understanding what makes thinking in college different from thinking in high school
- Learning how to think
- Knowing the types of thinking
- Recognizing why all types of thinking are important
- Understanding what critical thinking is
- Recognizing and avoiding logical fallacies and faulty assumptions
- Establishing critical thinking habits
- Researching and thinking critically
- Understanding what creative thinking is
- Developing creative thinking habits
- Solving problems
- Making decisions
- Brainstorming



It is all in your head

Remember all the thinking you did in high school? Most of it was recalling facts or information you had previously committed to memory. Perhaps in some courses you were asked to support a statement or hypothesis using content from your textbook or class. Your thinking in high school was very structured and tied closely to reflecting what was taught in class.

In college, you are expected to think for yourself; to access and evaluate new approaches and ideas; to contribute to your knowledge base; and to develop or create new, fresh ideas. You will be required to develop and use a variety of thinking skills—higher-order thinking skills—which you seldom used in high school.

In college, your instructors' roles will be not only to supply a base of new information and ideas, as good instructors will challenge you to stretch your skills and knowledge base through critical and creative thinking. Much of their teaching involves the questions they ask, not the directions they give. Your success in college education—and in life beyond college—is directly linked to becoming a better and more complete thinker. Becoming a better and more complete thinker requires mastering some skills and consistent practice.

Types of thinking

1. Understand that there are different types of thinking.

2. Identify how each type of thinking contributes to learning.

So, what are the various types of thinking skills, and what kind things are we doing when we apply them? In the 1950s, Benjamin Bloom developed a classification of thinking skills that is still helpful today; it is known as Bloom's taxonomy.

He lists six types of thinking skills, ranked in order of complexity:

- knowledge,
- comprehension,
- application,
- analysis,
- synthesis, and
- evaluation.

The table on the following page (Types of Thinking Skills), outlines each skill and what is involved in that type of thinking, as updated by Lorin Anderson and David Krothwohl.L. W. Anderson and David R. Krathwohl, eds., A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational

Objectives (Boston, MA: Allyn & Bacon, 2001). **Note:** Tap on the table to expand it to full-page view.

Thinking Skill	What It Involves
1. Remembering and Recalling	Retrieving or repeating information or ideas from memory. This is the first and most basic thinking skill you develop (starting as a toddler with learning numbers, letters, and colors).
2. Understanding	Interpreting, constructing meaning, inferring, or explaining material from written, spoken, or graphic sources. Reading is the most common understanding skill; these skills are developed starting with early education.
3. Applying	Using learned material or implementing material in new situations. This skill is commonly used starting in middle school (in some cases earlier).
4. Analyzing	Breaking material or concepts into key elements and determining how the parts relate to one another or to an overall structure or purpose. Mental actions included in this skill are examining, contrasting or differentiating, separating, categorizing, experimenting, and deducing. You most likely started developing this skill in high school (particularly in science courses) and will continue to practice it in college.
5. Evaluating	Assessing, making judgments, and drawing conclusions from ideas, information, or data. Critiquing the value and usefulness of material. This skill encompasses most of what is commonly referred to as critical thinking; this skill will be called on frequently during your college years and beyond. Critical thinking is the first focus of this chapter.
6. Creating	Putting parts together or reorganizing them in a new way, form, or product. This process is the most difficult mental function. This skill will make you stand out in college and is in very high demand in the workforce. Creative thinking is the second focus of this chapter.

All of these thinking skills are important for college work and life in the real world. You've likely had a great deal of experience with the lower-level thinking skills (yellow section). The midlevel skills are skills you will get a lot of practice with in college, and you may be well on your way to mastering them already. The higher-level thinking skills (red section) are the most demanding, and you will need to invest focused effort to develop them.

Exercise: thought inventory

Think about the adjacent table. Are you using all six thinking skills? Reflect on your work in the past and identify specific examples where you used each of the thinking skills. Write notes about the skills that are second nature to you and those you would like to develop further.

Skill set

Remembering and recalling

Understanding

Applying

Analyzing

Evaluating

Creating

Next, look at the lists of things you actually did in each case that has demonstrated the particular skill set. Notice that there are certain verbs that apply to each skill set. When you see those verbs as a prompt in an assignment or an exam, you will know what kind of thinking the instructor expects from you. The following table (Thinking Verbs) lists some of the most common verbs associated with each thinking skill.

Skill Set	Verbs
1. Remembering and recalling	Bookmark, count, describe, draw, enumerate, find, google, identify, label, list, match, name, quote, recall, recite, search, select, sequence, tell, write
2. Understanding	Blog, conclude, describe, discuss, explain, generalize, identify, illustrate, interpret, paraphrase, predict, report, restate, review, summarize, tell, tweet
3. Applying	Apply, articulate, change, chart, choose, collect, compute, control, demonstrate, determine, do, download, dramatize, imitate, implement, interview, install (as in software), participate, prepare, produce, provide, report, role-play, run (software), select, share, show, solve, transfer, use
4. Analyzing	Analyze, break down, characterize, classify, compare, contrast, debate, deduce, diagram, differentiate, discriminate, distinguish, examine, infer, link, outline, relate, research, reverse-engineer, separate, subdivide, tag
5. Evaluating	Appraise, argue, assess, beta test, choose, collaborate, compare, contrast, conclude, critique, criticize, decide, defend, "friend/de-friend," evaluate, judge, justify, network, post, predict, prioritize, prove, rank, rate, review, select, support
6. Creating	Adapt, animate, blog, combine, compose, construct, create, design, develop, devise, film, formulate, integrate, invent, make, model, modify, organize, perform, plan, podcast, produce, program, propose, rearrange, remix, revise, rewrite, structure

Throughout this book, there are tips that will help you develop your thinking skills. This chapter will focus on critical thinking (evaluating) and creative thinking. They deserve specific focus because they are likely to be the skills you have least practice with. These are the skills most helpful for success in college and in "real life." Creative thinking will help you come up with possible solutions for problems and new ideas. Critical thinking will help you decide which of those ideas have most merit and deserve to be implemented.

Key takeaways

- We use different types of thinking skills to address different requirements, and these skills are classified in Bloom's taxonomy.
- You have been using many thinking skills since childhood.
- Two very important thinking skills you will need to develop for success in college and in life are critical (or evaluative) thinking and creative thinking.

It is critical

Americans have access to:

- 1 million new books each year
- 5,500 magazines
- 10,500 radio stations
- 65,000 iPhone apps
- 1,000,000,000,000 web pages

Tap on the following thumbnail to watch the YouTube video, *Did You Know 4.0*.

In today's environment, it is not so critical to "know" a great deal of information. The list above indicates how much information we can easily access. In fact, the abundance of information might be the greater challenge. Your success will depend on what you can do with the information, not just on what you know. How we filter and use that abundance of data is the reason critical thinking has become so important today.

Critical thinking is the ability to discover the value of an idea, a set of beliefs, a claim, or an argument. It requires you to use logic and reasoning to evaluate evidence or information to make a decision or reach a conclusion. Critical thinking is:

- a foundation for effective communication,
- the principal skill used in effective decision making,
- at the core of creating new knowledge, and
- a way to uncover bias and prejudices.

Critical thinking is a part of everyday life, too. Decisions you make can have a lasting impact on your life, and these decisions benefit from critical thinking. Did you ever decide to quit smoking or to lose weight? Were you successful? How did you decide to attend the college you are in? Was that the right choice for you? In any of these cases, could you have made a better decision if you had better or more information?

The critical thinking process

The critical thinking process is really nothing more than asking the right questions to understand a problem or issue and then gathering the data you need to complete the decision or take sides on an issue.

What is the problem or issue I am considering really about?

Understanding this is key to successful critical thinking. What is the objective? A position? A decision? Are you deciding what candidate in an election will do a better overall job, or are you looking to strengthen the political support for a particular cause? Are you really against a recommendation from your dad, or are you using the issue to establish your independence?
Do you understand the terms related to the issue? Are you in agreement with the proponent's definitions? For example, if you are evaluating a quotation on the health-care system for use in a paper, your objective might be to decide to use the quotation or not, but before you can make that decision you need to understand what the writer is really saying. If a term like "family" is used, for example, does it mean direct relations or extended family?

What are my options?

What are choices that are available to you (if you are making a decision), or what are the "sides" (in the case of a position) you might choose to agree with? What are their differences? What are the likely consequences of each option? In making a decision, it might be helpful to ask yourself, "What is the worst thing that might happen in each scenario?" Examining different points of view is very important; there may be dozens of alternative viewpoints to a particular issue—and the validity of each can change depending on circumstances. A position that is popular or politically correct today may not have been a year ago, and there is no guarantee it will be right in the future. Likewise, a solution to a personal problem that was successful for your roommate may not apply to you. Remember also that sometimes the best option might be a combination of the options you identify initially.

What do I know about each option?

First, make sure you have all the information about each option. Do you have all the information to support each of your likely options? What is still missing? Where can you get the information you need? Keep an open mind and don't dismiss supporting information on any position before you evaluate it carefully.

How good is my information?

Now it's time to evaluate the quality of the support of each option or point of view. Evaluate the strengths and the weaknesses of each piece of supporting evidence. Are all the relevant facts presented? Are some facts presented in misleading ways? Are enough examples presented to support the premise? Consider the source of the supporting information. Who is the expert presenting the facts? That "expert" may have a vested interest in the position. Consider that bias, more for understanding the point

of view than for rejecting it. Consider your own opinions (especially when working with emotional issues); are your emotional ties to a point of view getting in your way of clear thinking (your own biases)? If you really like a particular car model, are you giving the financial implications of buying that car a fair consideration? Are there any errors or fallacies in your logic?

Fallacies are defects in logic that weaken arguments. You should learn to identify them in your own thinking so you can strengthen your positions, as well as in the arguments of others when evaluating their strength.

Fallacies & how to avoid them

Fallacy: generalizations

Generalizations entail making assumptions about a whole group of people based on an inadequate sample. Examples include: “Engineering students are nerds,” and “My economics class is boring, and my friend says her economic class is boring, too—therefore all economics classes are boring.” This can be avoided in your own thinking by considering what kind of sample you are using. Is it large enough to support the conclusions? You may want to increase your sample size or draw a more modest conclusion by using the word “some” or “many.”

Fallacy: false cause

A false cause entails drawing improper conclusions through sequencing. If A comes before B, then A causes B. An example is “I studied biology last term, and this term I’m taking organic chem, which is very confusing. Biology makes chemistry confusing.” This can be avoided when making causal statements, if you are sure you can explain the process through which A causes B beyond their mere sequence.

Fallacy: personalizations

Also known by their Latin names (ad hominem, or “against the man,” and tu quoque, or “you too”), personalizations entail inserting personalities inappropriately into an argument (e.g., common in political arguments). An example is *against the man*: “I won’t support Senator Smith’s education bill. He’s had a mistress and marital problems.” This can be avoided in your own thinking by focusing on the merits and supporting data of an argument, not on the personality or behavior of the people making the arguments.

Fallacy: everyone does it

Also known by its Latin name (ad populum, or “against many”), the everyone does it fallacy is justifying an issue based solely on the number of people involved. An example is *you too*: A parent

explains the evidence of the risks of binge drinking. The child rejects the arguments, saying, “When you were my age, you drank too.” Another example would be “It’s healthy to drink only soda; millions of American kids do.” This can be avoided in your own thinking by understanding that the popular position is not always the right one. Be wary of arguments that rely exclusively on one set of numbers.

Fallacy: appealing to authority

Appealing to authority is using an endorsement from someone as a primary reason for supporting a point of view. An example is “We should oppose higher taxes; Curt Schilling does.” Pitcher Curt Schilling may be a credible authority on baseball, but is he an authority on taxes? This can be avoided in your own thinking by acknowledging that quoting authorities is a valuable tool to build an argument; make sure the authorities you quote are truly subject matter experts on the issue you are discussing.

Fallacy: weak analogy

Weak analogy is using irrelevant similarities in two objects to draw a conclusion. An example is how cars and motorcycles are both driven at high speeds on the highway. “Car drivers are not required to wear helmets, so motorcycle riders should not have to either.” You can draw an analogy between just about any two objects or ideas. Weak analogy can be avoided in your own thinking by using analogies that you are sure have identified the properties relevant to the argument you are making and see if both share those properties. (In the example, the motorcycle does

not provide protection to the rider, but the car does. Equating the two vehicles based on traveling speed is not relevant to the argument.)

Fallacy: false dichotomy

A false dichotomy is setting up a situation in which it looks like there are only two possible options. If one option is discredited, the other must be accepted. The classic example here is "America, love it or leave it."

This can be avoided by examining your own thinking. Are there really only two options? Look for the third option. If you were asked to develop a compromise between the two positions, what would it look like? What would its strengths and weaknesses be?

You will need to use critical thinking throughout your college years and beyond. Here are some common critical thinking situations and the kinds of questions you should ask to apply critical thinking.

Personal choices

Examples include "What should I major in?" and "Should I buy a new car?" What do you know about each of your options? What is the quality of that information? Where can you get more (reliable) information? How do those options relate to your financial and emotional needs? What are the pros and cons of each option? Are you open to the points of view of others who may be involved?

Reading, listening, note-taking, and studying

What are the core messages of the instructor or author? Why are they important? How do these messages relate to one another or differ?

Research papers

What evidence do you need to support your thesis? What sources are available for that evidence? Are they reliable sources? Are there any fallacies in your argument?

Essay questions on exams

What is the professor really asking you to do? What do you know about the question? What is your personal belief about the question? What are the beliefs or biases of the professor or quoted authors? What are the arguments against your point of view? What are the most important pieces of evidence you should offer to support your answer?

Tips for critical thinking

Consider all points of view; seriously consider more than two (look for grey areas).

- Keep an open mind.
- Answer three questions about your supporting data:

1. Is it enough support?
2. Is it the right support?
3. Is it credible?

- Look for evidence that contradicts your point of view. Pretend to disagree with the position you are supporting. What parts of your argument are weak? Do you have the supporting facts to overcome that evidence?
- Create a set of criteria you will use to evaluate the strength of information you want to use to support your argument. Ask questions like these:

1. What is the source of this information?
2. Is the author well respected in the field?
3. When was this information developed? Is that important? Why?
4. Does the author or publisher have an agenda for publishing the information? How does that agenda affect the credibility of the information?

- Create a table on which you list your main points, then for each one, list the evidence you have to support it. This method will help you visually identify where you have weak evidence and what points actually lack evidence.
- Be willing to admit that you lack information to support a point of view or make a decision. Ask questions or do some focused research to get what you still need.
- Make sure that your assumptions and points of view are supported by facts, not opinions.
- Learn what types of fallacies you use habitually, and then be on the lookout for them. Writers will often rely on certain types of arguments as a matter of habit. Review some of your old papers to identify which fallacies you need to avoid.
- Question your characterizations of others. Are those authorities truly competent in the area you are considering? Are you attacking the opponents of your point of view rather than attacking their arguments?
- Be careful of broad generalizations. Claims that use absolute words like “all,” “none,” “always,” “never,” “no one,” and “everyone” require much more proof than claims that use words like “most,” “some,” “often,” “rarely,” “sometimes,” and so on.

Where did that come from?

One of the most consistent uses for critical thinking in your work is in considering the value of research material and deciding how to use it. The Internet gives you access to an almost unlimited amount of data, and you must choose what to use carefully.

Following are some guidelines.

1. Look at the URL, the Web address. It can give you important information about the reliability and intentions of the site. Start with the page publisher. Have you heard of this source before? If so, would you consider it a reliable source for the kind of material you are about to read? Now consider the domain type in the URL, which follows the period after the publisher: ".com" and ".biz" are used by commercial enterprises, ".org" is normally used by nonprofit organizations, and ".edu" is reserved for educational institutions. None of these is necessarily bad or good, but they may give you a sense behind the motivation for publishing this material. Are you dealing with a company or the Web site of an individual—and how might that affect the quality of the information on that site?
2. What can you learn from poking around with navigation tabs or buttons, and what do they tell you about the objective of the Web site? Look for a tab labeled "About Us" or "Biography."
3. Consider what others are saying about the site. Does the author offer references, reviews, or quotations about the material? What do they say? Check the blogosphere to see what other people think of the author or Web site.
4. Trust your own impressions about the material. Is the information consistent with what you already know?
5. Ask yourself why the Web site was written. (To inform? To provide data or facts? To sell something? To promote a cause? To parody?)

Key takeaways

- Critical thinking is evaluating the strength of your arguments, data, and information.
- Three questions to ask about the support for an argument or position:

  1. Is it enough support?
  2. Is it the right support?
  3. Is it credible?

- Weaknesses in arguments are most commonly logical fallacies. Recognizing them will help evaluate the strength of an argument effectively.

Searching for "Aha!"

Generating new ideas, fostering innovation, and developing processes or plans to implement them are something that cannot be easily farmed out, and these are strengths you can develop. Businesses want problem solvers, not just doers. Developing your creative thinking skills will position you for lifelong success in whatever career you choose.

Creative thinking is the ability to look at things from a new perspective, to come up with fresh solutions to problems. It is a

deliberate process that allows you to think in ways that improve the likelihood of generating new ideas or thoughts. Let us start by killing a couple of myths:

- **Creativity is an inherited skill.** Creativity is not something people are born with but is a skill that is developed over time with consistent practice. It can be argued that people you think were "born" creative because their parents were creative, too, are creative simply because they have been practicing creative thinking since childhood, stimulated by their parents' questions and discussions.

- **Creativity is free-form thinking.** While you may want to free yourself from all preconceived notions, there is a recognizable structure to creative thinking. Rules and requirements do not limit creative thinking—they provide the scaffolding on which truly creative solutions can be built. Free-form thinking often lacks direction or an objective; creative thinking is aimed at producing a defined outcome or solution.

Creative thinking involves coming up with new or original ideas; it is the process of seeing the same things others see but seeing them differently. You use skills such as examining associations and relationships, flexibility, elaboration, modification, imagery, and metaphorical thinking. In the process, you will stimulate your curiosity, come up with new approaches to things, and have fun!

Tips for creative thinking

- Feed your curiosity. Read. Read books, newspapers, magazines, blogs—anything at any time. When surfing the Web, follow links just to see where they will take you. Go to the theatre or movies. Attend lectures. Creative people make a habit of gathering information, because they never know when they might put it to good use.

  Creativity is often as much about rearranging known ideas as it is about creating a completely new concept. The more "known ideas" you have been exposed to, the more options you'll have for combining them into new concepts.

- Develop your flexibility by looking for a second right answer. Throughout school we have been conditioned to come up with the right answer; the reality is that there is often more than one "right" answer. Examine all the possibilities.

  To test this, examine all of the items illustrated on the following page. Note which is different from all the others. What do you find?

a. Apple

c. Board

b. Olives

d. Clams

If you chose C, you're right; you can't eat a board. Maybe you chose D; that's right, too—clams are the only animal on the chart. B is right, as it's the only item you can make oil from, and A can also be right; it's the only red item.

Each option can be right depending on your point of view. Life is full of multiple answers, and if we go along with only the first most obvious answer, we are in danger of losing the context for our ideas. The value of an idea can only be determined by comparing it with another. Multiple ideas will also help you generate new approaches by combining elements from a variety of "right" answers. In fact, the greatest danger to creative thinking is to have only one idea. Always ask yourself, "What's the other right answer?"

- **Combine old ideas in new ways.** When King C. Gillette registered his patent for the safety razor, he built on the idea of disposable bottle caps, but his venture didn't become profitable until he toyed with a watch spring and came up with the idea of how to manufacture inexpensive (therefore disposable) blades. Bottle caps and watch springs are far from men's grooming materials, but Gillette's genius was in combining those existing but unlikely ideas. Train yourself to think "out of the box." Ask yourself questions like, "What is the most ridiculous solution I can come up with for this problem?" or "If I were transported by a time machine back to the 1930s, how would I solve this problem?" You may enjoy watching competitive design, cooking, or fashion shows (Top Chef, Chopped, Project Runway, etc.); they are great examples of combining old ideas to make new, functional ones.

- **Think metaphorically.** Metaphors are useful to describe complex ideas; they are also useful in making problems more familiar and in stimulating possible solutions. For example, if

you were a partner in a company about to take on outside investors, you might use the pie metaphor to clarify your options (a smaller slice of a bigger pie versus a larger slice of a smaller pie). If an organization you are a part of is lacking direction, you may search for a "steady hand at the tiller," communicating quickly that you want a consistent, non-reactionary, calm leader. Based on that ship-steering metaphor, it will be easier to see which of your potential leaders you might want to support. Your ability to work comfortably with metaphors takes practice. When faced with a problem, take time to think about metaphors to describe it, and the desired solution. Observe how metaphors are used throughout communication and think about why those metaphors are effective. Have you ever noticed that the financial business uses water-based metaphors (cash flow, frozen assets, liquidity) and that meteorologists use war terms (fronts, wind force, storm surge)? What kinds of metaphors are used in your area of study?

- **Ask.** A creative thinker always questions the way things are: Why are we doing things this way? What were the objectives of this process and the assumptions made when we developed the process? Are they still valid? What if we changed certain aspects? What if our circumstances changed? Would we need to change the process? How? Get in the habit of asking questions—lots of questions.

Key takeaways

- Creative thinking is a requirement for success.
- Creative thinking is a deliberate process that can be learned and practiced.
- Creative thinking involves, but is not limited to, curiosity, flexibility, looking for the second right answer, combining things in new ways, thinking metaphorically, and questioning the way things are.

Checkpoint exercises

Feed your curiosity. List five things you will do in the next month that you have never done before (go to the ballet, visit a local museum, try Moroccan food, or watch a foreign movie). Expand your comfort "envelope." Put them on your calendar.

1. _____
2. _____
3. _____
4. _____
5. _____

Note: Assignment 1b is on the following page.

Assignment 1b & 1c

How many ways can you use it? Think of as many uses for the following common items as possible. Can you name more than five?

1. Peanut butter (PBJ counts as one regardless of the flavor of jelly)
2. Paper clips

Next, practice this metaphor for life. In the movie *Forrest Gump*, Forrest states, “Life is like a box of chocolates; you never know what you’re gonna get.” Write your own metaphor for life.

Then, submit your common items lists from Assignment 1b and your metaphor for life from Assignment 1c in Canvas under Reading Assignment 1.

Problem solving & decision-making

Much of your college and professional life will be spent solving problems; some will be complex, such as deciding on a career, and require time and effort to come up with a solution. Others will be small, such as deciding what to eat for lunch, and will allow you to make a quick decision based entirely on your own experience. But, in either case, when coming up with the solution and deciding what to do, follow the same basic steps.

- **Define the problem.** Use your analytical skills. What is the real issue? Why is it a problem? What are the root causes? What kinds of outcomes or actions do you expect to generate to solve the problem? What are some of the key characteristics that will make a good choice: Timing? Resources? Availability of tools and materials? For more complex problems, it helps to actually write out the problem and the answers to these questions. Can you clarify your understanding of the problem by using metaphors to illustrate the issue?

- **Narrow the problem.** Many problems are made up of a series of smaller problems, each requiring its own solution. Can you break the problem into different facets? What aspects of the current issue are “noise” that should not be considered in the problem solution? (Use critical thinking to separate facts from opinion in this step.)

- **Generate possible solutions.** List all your options. Use your creative thinking skills in this phase. Did you come up with the second “right” answer, and the third or the fourth? Can any of these answers be combined into a stronger solution? What past or existing solutions can be adapted or combined to solve this problem?

Group think: effective brainstorming

Brainstorming is a process of generating ideas for solutions in a group. This method is very effective because ideas from one person will trigger additional ideas from another. The following guidelines make for an effective brainstorming session:

- Decide who should moderate the session. That person may participate, but his main role is to keep the discussion flowing.
- Define the problem to be discussed and the time you will allow to consider it.
- Write all ideas down on a board or flip chart for all participants to see.
- Encourage everyone to speak.
- Do not allow criticism of ideas. All ideas are good during a brainstorm. Suspend disbelief until after the session. Remember a wildly impossible idea may trigger a creative and feasible solution to a problem.
- Choose the best solution. Use your critical thinking skills to select the most likely choices. List the pros and cons for each of your selections. How do these lists compare with the requirements you identified when you defined the problem? If you still can't decide between options, you may want to seek further input from your brainstorming team.

Decisions, decisions

You will be called on to make many decisions in your life. Some will be personal, like what to major in, or whether or not to get married. Other times you will be making decisions on behalf of others at work or for a volunteer organization. Occasionally you will be asked for your opinion or experience for decisions others are making. To be effective in all of these circumstances, it is helpful to understand some principles about decision making.

First, define who is responsible for solving the problem or making the decision. In an organization, this may be someone above or below you on the organization chart but is usually the person who will be responsible for implementing the solution. Deciding on an academic major should be your decision, because you will have to follow the course of study. Deciding on the boundaries of a sales territory would most likely be the sales manager who supervises the territories, because he or she will be responsible for producing the results with the combined territories. Once you define who is responsible for making the decision, everyone else will fall into one of two roles: giving input, or in rare cases, approving the decision.

Understanding the role of input is very important for good decisions. Input is sought or given due to experience or expertise, but it is up to the decision maker to weigh the input and decide

whether and how to use it. Input should be fact based, or if offering an opinion, it should be clearly stated as such. Finally, once input is given, the person giving the input must support the other's decision, whether or not the input is actually used. Consider a team working on a project for a science course. The team assigns you the responsibility of analyzing and presenting a large set of complex data. Others on the team will set up the experiment to demonstrate the hypothesis, prepare the class presentation, and write the paper summarizing the results. As you face the data, you go to the team to seek input about the level of detail on the data you should consider for your analysis. The person doing the experiment setup thinks you should be very detailed, because then it will be easy to compare experiment results with the data. However, the person preparing the class presentation wants only high-level data to be considered because that will make for a clearer presentation. If there is not a clear understanding of the decision-making process, each of you may think the decision is yours to make because it influences the output of your work; there will be conflict and frustration on the team. If the decision maker is clearly defined upfront, however, and the input is thoughtfully given and considered, a good decision can be made (perhaps a creative compromise?) and the team can get behind the decision and work together to complete the project.

Finally, there is the approval role in decisions. This is very common in business decisions but often occurs in college work as well (the professor needs to approve the theme of the team project, for example). Approval decisions are usually based on availability of resources, legality, history, or policy.

Key takeaways

- Effective problem solving involves critical and creative thinking.
- The four steps to effective problem solving are the following:

1. Define the problem
2. Narrow the problem
3. Generate solutions
4. Choose the solution

- Brainstorming is a good method for generating creative solutions.
- Understanding the difference between the roles of deciding and providing input makes for better decisions.

Chapter review

- Your ability to think critically and creatively is a key to your success in college and in life. You should develop and practice these skills.

- Bloom's taxonomy provides a framework to describe the many kinds of thinking we need to do. Up to this point, you probably have practiced most of the lower-level thinking skills but have not had much experience with the higher-level skills (critical thinking and creative thinking).

- Critical thinking involves evaluating the strength of ideas or concepts by asking questions about them. Critical thinking will also allow you to identify and weed out logical fallacies that weaken the value of an idea.

- Creative thinking is the process of generating new ideas, concepts, or solutions. This often involves adapting existing ideas or combining them in new ways to create a new solution.

- Problem solving is effectively achieved by applying both critical thinking and creative thinking to generate viable solutions and decisions.

FEEDBACK

Tap on the thumbnail above to leave feedback for your professor.

Chapter 2

Writing

After reading this chapter, students should be able to do the following:

1. Define academic writing.

2. Demonstrate writing as a process.

3. Distinguish between revision and editing.

4. Interpret how to integrate research in writing.

Where are you now?

Assess your present writing knowledge and attitudes.

	Yes	Unsure	No
1. I enjoy writing and am a confident and productive writer.			
2. I know what my instructors expect in student writing.			
3. I understand the feedback I get from instructors and accept their criticism.			
4. I am comfortable sharing my writing with peers.			
5. I begin working on papers early and always revise my first full draft before turning in the paper.			
6. I have a consistent approach to the writing process that works well for me.			
7. I understand what plagiarism is and always cite online and print sources as required.			
8. I seek out help whenever needed as I work on paper assignments.			
9. I try to write all my college papers as if they were written for my composition instructor.			

Where do you want to go?

Think about how you answered the questions above. Be honest with yourself. On a scale of 1 to 10, how would you rate your level of confidence and your attitude about writing?

Not very strong									Very strong	
1	2	3	4	5	6	7	8	9	10	

From the following list, choose the three areas you see as most important to your improvement as a writer:

- Using time effectively
- Using sources effectively and appropriately
- Understanding instructors' expectations
- Citing sources in the proper form
- Being productive with brainstorming and other prewriting activities
- Sharing my work in drafts and accepting feedback
- Organizing ideas clearly and transitioning between ideas
- Understanding the difference between proofreading and revision
- Developing ideas fully
- Drafting and redrafting in response to criticism
- Using correct sentence mechanics (grammar, punctuation, etc.)
- Using Web sites, reference books, and campus resources
- Developing an academic "voice"

Next, think about the three things you chose: Why did you choose them? Have you had certain kinds of writing difficulties in the past? Consider what you hope to learn here.

Assignment 2a

Take the three choices you made from the list on the previous page. In Canvas, submit your three areas and your explanations of why you chose them under Reading Assignment 2.

How to get there

Here is what we will work on in this chapter:

- Understanding why writing is vital to your success in college
- Learning how writing in college differs from writing in high school
- Understanding how a writing class differs (and doesn't differ) from other classes with assigned writing
- Knowing what instructors in college expect of you as a writer
- Knowing what different types of assignments are most common in college
- Using the writing process to achieve your best work
- Identifying common errors and become a better editor of your own work
- Responding to an instructor's feedback on your work in progress and on your final paper
- Using sources appropriately and avoiding plagiarism
- Writing an in-class essay, for an online course, and in group writing projects

The importance of writing

Writing is one of the key skills all successful students must acquire. You might think your main job in a history class is to learn facts about events, so you read the textbook and take notes on important dates, names, causes, and so on. But, however important these details are to the instructor, they do not mean much if you cannot explain them in writing. Even if you remember the facts well and believe you understand their meaning completely, if you cannot express your understanding by communicating it—in college that almost always means in writing—then as far as others may know, you do not have an understanding at all. In a way, then, learning history is learning to write about history. Think about it. Great historians do not just know facts and ideas. Great historians use their writing skills to share their facts and ideas effectively with others.

History is just one example. Consider a lab course—a class that is as much hands-on as any in college. At some point, you will be asked to write a step-by-step report on an experiment you have run. The quality of your lab work will not show if you cannot describe that work and state your findings well in writing. Even though many instructors in courses other than English classes may not comment directly on your writing, their judgment of your understanding will still be mostly based on what you write. This means that in all your courses, not just your English courses, instructors expect good writing. Think off your professions and how effective writing will improve your skill set.

In college courses, writing is how ideas are exchanged from scholars to students and from students back to scholars. While the grade in some courses may be based mostly on class participation, oral reports, or multiple-choice exams, writing is by far the single most important form of instruction and assessment. Instructors expect you to learn by writing, and they will grade you on the basis of your writing.

By paying attention to your writing and learning and practicing basic skills, even those who never thought of themselves as good writers can succeed in college writing. As with other college skills, getting off to a good start is mostly a matter of being motivated and developing a confident attitude that you can do it.

As a form of communication, writing is different from oral communication in several ways. Instructors expect writing to be well thought-out and organized and to explain ideas fully. In oral communication, the listener can ask for clarification, but in written work, everything must be clear within the writing itself.

Note: Most college students take a writing course their first year, often in the first term. Even if you are not required to take such a class, it is a good idea for all students to learn more about college writing. This short chapter cannot cover even a small amount of what you will learn in a full writing course. The goal here is to introduce some important writing principles, if you are not yet familiar with them, or to remind you of things you may have already learned in a writing course. As with all advice, always pay the most attention to what your instructor says—the terms of a specific assignment may overrule a tip given here!

What is different about college writing?

Academic writingAnalytical or informative nonfiction writing that is assigned by college instructors. refers to writing produced in a college environment. Often this is writing that responds to other writing—to the ideas or controversies that you will read about. While this definition sounds simple, academic writing may be very different from other types of writing you have done in the past. Often college students begin to understand what academic writing really means only after they receive negative feedback on their work. To become a strong writer in college, you need to achieve a clear sense of two things:

1. The academic environment

2. The kinds of writing you will be creating in that environment

Differences between high school & college writing

Students who struggle with writing in college often conclude that their high school teachers were too easy or that their college instructors are too hard. In most cases, neither explanation is fully accurate or fair. A student having difficulty with college writing usually just has not yet made the transition from high school writing to college writing. That should not be surprising, for many beginning college students do not even know that there is a transition to be made.

This does not mean that students do not learn a great deal in high school, but it is easy to see why some students think that writing is important only in English classes. Many students also believe an academic essay must be five paragraphs long or that “school writing” is usually literary analysis.

Think about how college differs from high school. College instructors may design their courses in unique ways, and they may teach about specialized subjects. For all of these reasons, college instructors are much more likely than high school teachers to:

- assign writing;
- respond in detail to student writing. and
- ask questions that cannot be dealt with easily in a fixed form like a five-paragraph essay.

Your transition to college writing could be even more dramatic. The kind of writing you have done in the past may not translate at all into the kind of writing required in college. For example, you may at first struggle with having to write about very different kinds of topics, using different approaches. You may have learned only one kind of writing genreA kind or type of essay; an approach or a specific form of organization; a compare-and-contrast essay, for example, is a genre often assigned by college instructors. (a kind of approach or organization) and now find you need to master other types of writing as well.

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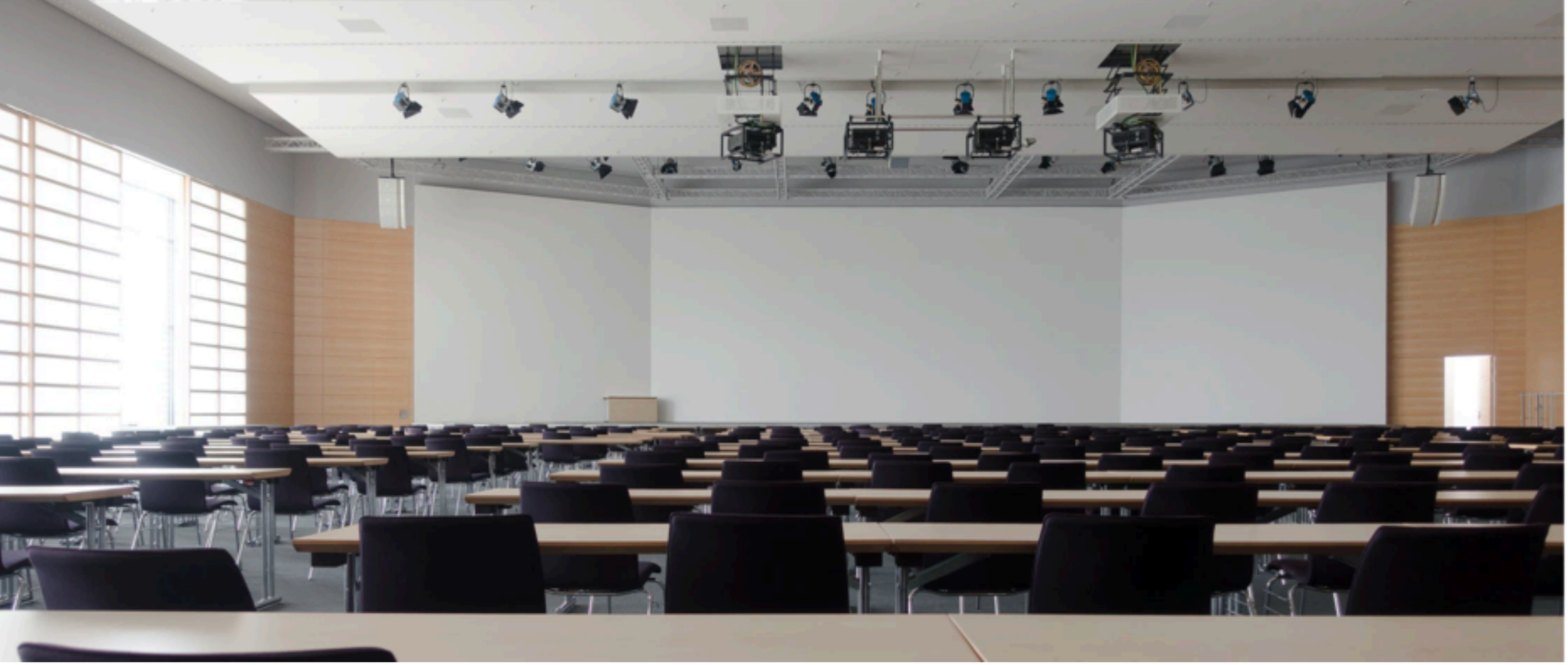


What kinds of papers are commonly assigned in college classes?

Think about the topic “gender roles”—referring to expectations about differences in how men and women act. You might study gender roles in an anthropology class, a film class, or a psychology class. The topic itself may overlap from one class to another, but you would not write about this subject in the same way in these different classes. For example, in an anthropology class, you might be asked to describe how men and women of a particular culture divide important duties. In a film class, you may be asked to analyze how a scene portrays gender roles enacted by the film’s characters. In a psychology course, you might be asked to summarize the results of an experiment involving gender roles or compare and contrast the findings of two related research projects.

It would be simplistic to say that there are three, or four, or ten, or any number of types of academic writing that have unique characteristics, shapes, and styles. Every assignment in every course is unique in some ways, so do not think of writing as a fixed form you need to learn. On the other hand, there are certain writing approaches that do involve different kinds of writing. An

approach is the way you go about meeting the writing goals for the assignment. The approach is usually signaled by the words instructors use in their assignments.

When you first get a writing assignment, pay attention first to keywords for how to approach the writing. These will also suggest how you may structure and develop your paper. Look for terms like these in the assignment:

- **Summarize:** To restate in your own words the main point or points of another's work.
- **Define:** To describe, explore, or characterize a keyword, idea, or phenomenon.
- **Classify:** To group individual items by their shared characteristics, separate from other groups of items.
- **Compare/contrast:** To explore significant likenesses and differences between two or more subjects.
- **Analyze:** To break something, a phenomenon, or an idea into its parts and explain how those parts fit or work together.
- **Argue:** To state a claim and support it with reasons and evidence.
- **Synthesize:** To pull together varied pieces or ideas from two or more sources.

Sometimes the keywords listed do not actually appear in the written assignment, but they are usually implied by the questions given in the assignment. "What," "why," and "how" are common question words that require a certain kind of response. Look back at the keywords listed and think about which approaches relate to "what," "why," and "how" questions.

- "What" questions usually prompt the writing of summaries, definitions, classifications, and sometimes compare-and-contrast essays. For example, "What does Jones see as the main elements of Huey Long's populist appeal?" or "What happened when you heated the chemical solution?"
- "Why" and "how" questions typically prompt analysis, argument, and synthesis essays. For example, "Why did Huey Long's brand of populism gain force so quickly?" or "Why did the solution respond the way it did to heat?"

Successful academic writing starts with recognizing what the instructor is requesting, or what you are required to do. So pay close attention to the assignment. Sometimes the essential information about an assignment is conveyed through class discussions, however, be sure to listen for the keywords that will help you understand what the instructor expects. If you feel the assignment does not give you a sense of direction, seek clarification. Ask questions that will lead to helpful answers. For example, here is a short and very vague assignment: *Discuss the*

perspectives on religion of Rousseau, Bentham, and Marx. Papers should be four to five pages in length.

Faced with an assignment like this, you could ask about the scope (or focus)A deliberate and purposeful narrowing of coverage. Writers must define specific limitations to work within to narrow the scope or sharpen the focus of their subject. of the assignment:

- Which of the assigned readings should I concentrate on?
- Should I read other works by these authors that have not been assigned in class?
- Should I do research to see what scholars think about the way these philosophers view religion?
- Do you want me to pay equal attention to each of the three philosophers?

You can also ask about the approach the instructor would like you to take. You can use the keywords the instructor may not have used in the assignment:

- Should I just summarize the positions of these three thinkers, or should I compare and contrast their views?
- Do you want me to argue a specific point about the way these philosophers approach religion?
- Would it be OK if I classified the ways these philosophers think about religion?

Never just complain about a vague assignment. It is fine to ask questions like these. Such questions will likely engage your instructor in a productive discussion with you.

Key takeaways

- Writing is crucial to college success because it is the single most important means of evaluation.
- Writing in college is not limited to the kinds of assignments commonly required in high school English classes.
- Writers in college must pay close attention to the terms of an assignment.
- If an assignment is not clear, seek clarification from the instructor.

Assignment 2b

First, answer the following two questions:

1. What kind(s) of writing have you practiced most in your recent past?
2. Explain how the word “what” asks for a different kind of paper than the word “why.”

Next, after answering these questions, submit them to

How can I become a better writer?

If you approach your writing course merely as another hoop you need to jump through, you may miss out on the main message: writing is vital to your academic success at every step toward your degree, as well as in most careers.

What do instructors really want?

Some instructors may say they have no particular expectations for student papers. This is partly true. College instructors do not usually have one right answer in mind or one right approach to take when they assign a paper topic. **They expect you to engage in critical thinking** and decide for yourself what you are saying and how to say it. But in other ways, college instructors do have expectations, and it is important to understand them. Some expectations involve mastering the material or demonstrating critical thinking. Other expectations involve specific writing skills. Most college instructors expect certain characteristics in student writing. Here are general principles you should follow when writing essays or student "papers." (Some may not be appropriate for specific formats such as lab reports.)

Title the paper to identify your topic. This may sound obvious, but it needs to be said. Some students think of a paper as an exercise and write something like "Assignment 2: History 101" on the title page. Such a title gives no idea about how you are approaching the assignment or your topic. Your title should prepare your reader for what your paper is about or what you will argue. (With essays, always consider your reader as an educated adult interested in your topic. An essay is not a letter written to your instructor.) Compare the following:

Incorrect: Assignment 2: History 101

Correct: Why the New World Was Not "New"

It is obvious which of these two titles begins to prepare your reader for the paper itself. Similarly, do not make your title the same as the title of a work you are writing about. Instead, be sure your title signals an aspect of the work you are focusing on:

Incorrect: *Catcher in the Rye*

Correct: *Family Relationships in Catcher in the Rye*

Assignment 2c

First, create the title for your paper. For example, The Critical Analysis of John Smith's Life (insert the name of your paper topic person.)

Next, after creating the title for your paper, submit it to Canvas under Reading Assignment 2c.

Address the terms of the assignment. Again, pay particular attention to words in the assignment that signal a preferred approach. If the instructor asks you to "argue" a point, be sure to make a statement that actually expresses *your idea* about the topic. Without using first point of view: I. Then follow that statement with your reasons and evidence in support of the statement. Look for any signals that will help you focus or limit your approach. Since no paper can cover *everything* about a complex topic, what is it that your instructor wants you to cover?

Finally, pay attention to the little things. For example, if the assignment specifies "5 to 6 pages in length," write a five- to six-page paper. Do not try to stretch a short paper longer by enlarging the font (12 points is standard) or making your margins bigger than the normal one inch (or as specified by the instructor). **If the assignment is due at the beginning of class on Monday, have it ready then or before. Do not assume you can negotiate a revised due date.**

In your introduction, define your topic, and establish your approach or sense of purpose. Think of your introduction as an extension of your title. Instructors (like all readers) appreciate feeling oriented by a clear opening. They appreciate knowing that you have a purpose for your topic—that you have a reason for writing the paper. If they feel they have just been dropped into the middle of a paper, they may miss important ideas. They may not make connections you want them to make.

Build from a thesis or a clearly stated sense of purpose. Many college assignments require you to make some form of an argument. To do that, you generally start with a statement that needs to be supported and build from there. Your thesis is that statement; it is a guiding assertion for the paper. Be clear in your own mind of the difference between your topic and your thesis. The topic is what your paper is about; the thesis is what *you argue about the topic*. Some assignments do not require an explicit argument and thesis, but even then you should make clear at the beginning your main emphasis, your purpose, or your most important idea.

Develop ideas patiently. You might, like many students, worry about boring your reader with too much detail or information. But, college instructors will not be bored by carefully explained ideas, well-selected examples, and relevant details. College instructors, after all, are professionally devoted to their subjects. If your sociology instructor asks you to write about youth crime in rural areas, you can be sure he or she is interested in that subject.

In some respects, how you *develop* your paper is the most crucial part of the assignment. You will win the day with detailed explanations and well-presented evidence—not big generalizations. For example, anyone can write something broad (and bland) like: "The constitutional separation of church and state is a good thing for America"—but what do *you* really *mean* by that? Specifically? Are you talking about banning "Christmas

trees" from government property—or calling them "holiday trees" instead? Are you arguing for eliminating the tax-free status of religious organizations? Are you saying that American laws should never be based on moral values? The more you really dig into your topic—the more time you spend thinking about the specifics of what you really want to argue and developing specific examples and reasons for your argument—the more developed your paper will be. It will also be much more interesting to your instructor as the reader. Remember, those grand generalizations we all like to make ("America is the land of the free") actually do not mean much at all until we develop the idea in specifics. (Free to do what? No laws? No restrictions like speed limits? Freedom not to pay any taxes? Free food for all? What do you really mean when you say American is the land of the "free"?)

Integrate—do not just "plug in"—quotations, graphs, and illustrations. As you outline or sketch out your material, you will think things like "this quotation can go here" or "I can put that graph there." Remember that a quotation, graph, or illustration does not make a point for you. *You* make the point first and then use such material to help back it up as evidence. Using a quotation, a graph, or an illustration involves more than simply sticking it into the paper. Always lead into such material. Make sure the reader understands why you are using it, and how it fits in at that place in your presentation, and analyze it.

Build clear transitions at the beginning of every paragraph to link from one idea to another. A good paper is more than a list of good ideas. It should also show how the ideas fit together. As you write the first sentence of any paragraph, have a clear sense of what the prior paragraph was about. Think of the first sentence in any paragraph as a kind of bridge for the reader from what came before.

Document your sources appropriately. If your paper involves research of any kind, indicate clearly the use you make of outside sources. Include correct in-text citations. Careful research and the thoughtful application of the ideas and evidence of others is part of what college instructors' value.

Carefully edit your paper. College instructors require you will take the time to edit and proofread your essay. A misspelled word or an incomplete sentence may signal a lack of concern on your part. It may not seem fair to make a harsh judgment about your seriousness based on little errors, but in all writing, impressions count. Since it is often hard to find small errors in our own writing, always print out a draft well before you need to turn it in. Ask a classmate or a friend to review it and mark any word or sentence that seems "off" in any way. Although you should certainly use a spell-checker, do not assume it can catch everything. A spell-checker cannot tell if you have the *right* word. For example, these words are commonly misused or mixed up:

- there, their, they’re
- its, it’s
- effect, affect

Your spell-checker cannot help with these. You also cannot trust what a “grammar checker” (like the one built into the Microsoft Word spell-checker) tells you—computers are still a long way from being able to fix your writing for you!

The writing process

Writing instructors distinguish between process and product. The outcome or end result of a writing process; the finished paper you submit. The expectations described here all involve the “product” you turn in on the due date. Although you should keep in mind what your product will look like, writing is more involved with how you get to that goal. “Process” concerns how you work to actually write a paper. What do you actually do to get started? How do you organize your ideas? Why do you make changes along the way as you write? Thinking of writing as a process is important because writing is actually a complex activity. Even professional writers rarely sit down at a keyboard and write out an article beginning to end without stopping along the way to revise portions they have drafted, to move ideas around, or to revise their opening and thesis. Professionals and students alike often say they only realized what they wanted to say *after* they started to write. This is why many instructors see writing as a way to

learn. Many writing instructors ask you to submit a draft for review before submitting a final paper.

How can I make the process work for me?

No single set of steps automatically works best for everyone when writing a paper, but writers have found a number of steps helpful. Your job is to try out ways that your instructor suggests and discover what works for you. As you'll see in the following list, the process starts before you write a word. Generally there are three stages in the writing process:

1. Preparing before drafting (thinking, brainstorming, planning, reading, researching, outlining, sketching, etc.)—sometimes called "prewriting" (although you are usually still writing something at this stage, even if only jotting notes)

2. Writing the draft

3. Revising and editing

Because writing is hard, procrastination is easy. Do not let yourself put off the task. One good approach is to schedule shorter time periods over a series of days—rather than trying to sit down for one long period to accomplish a lot. (Even professional writers can write only so much at a time.) Try the following strategies to get started:

- **Discuss what you read, see, and hear.** Talking with others about your ideas is a good way to begin to achieve clarity. Listening to others helps you understand what points need special attention. Discussion also helps writers realize that their own ideas are often best presented in relation to the ideas of others.

- **Use e-mail to carry on discussions in writing.** An e-mail exchange with a classmate or your instructor might be the first step toward putting words on a page.

- **Brainstorm.** Jot down your thoughts as they come to mind. Just write away, not worrying at first about how those ideas fit together. (This is often called "free writing.") Take note of anything that stands out as particularly important to you. Also consider how parts of your scattered notes might eventually fit together or how they might end up in a sequence in the paper you will get to later on.

- **Ask and respond in writing to "what," "why," and "how" questions.** Good questions prompt productive writing sessions. Again, "what" questions will lead to descriptions or summaries; "why" and "how" questions will lead you to analyses and explanations. Construct your own "what," "why," and "how" questions and then start answering them.

- **In your notes, respond directly to what others have written or said about a topic you are interested in.** Most academic writing engages the ideas of others. Academic writing carries on a conversation among people interested in the field. By thinking of how your ideas relate to those of others, you can clarify your sense of purpose and sometimes even discover a way to write your introduction.

All of these steps and actions so far are "prewriting" actions. Again, almost no one just sits down and starts writing a paper at the beginning—at least not a successful paper! These prewriting steps help you get going in the right direction. Once you are ready to start drafting your essay, keep moving forward in these ways:

- **Write a short statement of intent or outline your paper before your first draft.** Such a road map can be very useful, but do not assume you will always be able to stick with your first plan. Once you start writing, you may discover a need for changes in the substance or order of things in your essay.
- **Write down on a card or a separate sheet of paper what you see as your paper's main point or thesis.** As you draft your essay, look back at that thesis statement. Are you staying on track? Or are you discovering that you need to change your main point or thesis? From time to time, check the development of your ideas against what you started out saying you would do. Revise as needed and move forward.
- **Reverse outline your paper.** Outlining is usually a beginning point, a road map for the task ahead. But many writers find that outlining what they have already written in a draft helps them see more clearly how their ideas fit or do not fit together. Outlining in this way can reveal trouble spots that are harder to see in a full draft. Once you see those trouble spots, effective revisionA critical reflection of an early draft that leads to significant changes. becomes possible.
- **Do not obsess over detail when writing the draft.** Remember, you have time for revising and editing later on. Now is the time to test out the plan you have made and see how your ideas develop. Then work on grammar and punctuation.
- **Read your draft aloud.** Hearing your own writing often helps you see it more plainly. A gap or an inconsistency in an argument that you simply do not see in a silent reading becomes evident when you give voice to the text. You may also catch mechanical mistakes by reading your paper aloud.

What is the difference between revising & editing?

Some students think of a draft as something that they need only "correct" after writing. They assume their first effort to do the assignment resulted in something that needs only surface

attention. This is a big mistake. A good writer does not write fast. Good writers know that the task is complicated enough to demand some patience. “Revision” rather than “correction” suggests seeing again in a new light generated by all the thought that went into the first draft. Revising a draft usually involves significant changes including the following:

- Making organizational changes like the reordering of paragraphs (do not forget that new transitions will be needed when you move paragraphs)
- Clarifying the thesis or adjustments between the thesis and supporting points that follow
- Cutting material that is unnecessary or irrelevant
- Adding new points to strengthen or clarify the presentation

Editing and proofreadingA close review of a revised draft that leads to stylistic refinements and sentence- or word-level corrections. are the last steps following revision. Correcting a sentence early on may not be the best use of your time since you may cut the sentence entirely. Editing and proofreading are

focused, late-stage activities for style and correctness. They are important final parts of the writing process, but they should not be confused with revision itself. Editing and proofreading a draft involve these steps:

- **Careful spellchecking.** This includes checking the spelling of names.
- **Attention to sentence-level issues.** Be especially attentive to sentence boundaries, subject-verb agreement, punctuation, and pronoun referents. You can also attend at this stage to matters of style.

Note: Remember to get started on a writing assignment early so that you complete the first draft well before the due date, allowing you needed time for genuine revision and careful editing.

What if I need help with writing?

Writing is hard work. Most colleges provide resources that can help you from the early stages of an assignment through to the completion of an essay.

Tutoring services. Most colleges have a tutoring service that focuses primarily on student writing. Look up and visit your tutoring center early in the term to learn what service is offered.

Lynn University provides an English Writing Lab available to students through the faculty of the College of Arts and Sciences. Also, available are the services:

- grammarly.com/edu
- www.tutor.com/lynnu
- lynn.joinknack.com

Writing Web sites and writing handbooks. Many writing Web sites and handbooks can help you along every step of the way, especially in the late stages of your work. You will find lessons on style as well as information about language conventions and "correctness." For more help, become familiar with a good Web site for student writers. There are many, but one recommended is maintained by the Dartmouth College Writing Center.

Plagiarism—and how to avoid it

Plagiarism is the unacknowledged use of another writer's words or ideas. is the unacknowledged use of material from a source. At the most obvious level, plagiarism involves using someone else's words and ideas as if they were your own. Notice that the definition of plagiarism involves "words and ideas."

Words. Copying the words of another is clearly wrong. If you use another's words, those words must be in quotation marks, and you must tell your reader where those words came from. But it is

not enough to make a few surface changes in wording. You cannot just change some words and call the material yours; close, extended paraphrase is not acceptable. For example, compare the two passages that follow. The first comes from Murder Most Foul, a book by Karen Halttunen on changing ideas about murder in nineteenth-century America; the second is a close paraphrase of the same passage:

Fist: The new murder narratives were overwhelmingly secular works, written by a diverse array of printers, hack writers, sentimental poets, lawyers, and even murderers themselves, who were displacing the clergy as the dominant interpreters of the crime.

Second: The murder stories that were developing were almost always secular works that were written by many different sorts of people. Printers, hack writers, poets, attorneys, and sometimes even the criminals themselves were writing murder stories. They were the new interpreters of the crime, replacing religious leaders who had held that role before.

It is easy to see that the writer of the second version has closely followed the ideas and even echoed some words of the original. This is a serious form of plagiarism. Even if this writer were to acknowledge the author with a citation, there would still be a problem. To simply cite the source at the end would not excuse using so much of the original source.

Ideas. Ideas are also a form of intellectual property. Consider this third version of the previous passage:

At one time, religious leaders shaped the way the public thought about murder. But in nineteenth-century America, this changed. Society's attitudes were influenced more and more by secular writers.

This version summarizes the original. That is, it states the main idea in compressed form in language that does not come from the original. But it could still be seen as plagiarism if the source is not cited. This example probably makes you wonder if you can write anything without citing a source. To help you sort out what ideas need to be cited and what not, think about these principles:

Common knowledge. There is no need to cite common knowledgeKnowledge that is generally accepted as true and that can be found easily in various sources.. Common knowledge does not mean knowledge everyone has. It means knowledge that everyone can easily access. For example, most people do not know the date of George Washington's death, but everyone can easily find that information. If the information or idea can be found in multiple sources and the information or idea remains constant from source to source, it can be considered common knowledge. Always check with your professor as to what is accepted as common knowledge.

Distinct contributions. One does need to cite ideas that are distinct contributionsKnowledge or an idea that may be disputed or that is not found in many sources.. A distinct contribution need not be a discovery from the work of one person. It need only be an insight that is not commonly expressed (not found in multiple sources) and not universally agreed upon.

Disputable figures. Always remember that numbers are only as good as the sources they come from. If you use numbers like attendance figures, unemployment rates, or demographic profiles —or any statistics at all—always cite your source of those numbers.

Everything said previously about using sources applies to all forms of sources. Some students mistakenly believe that material from the Web, for example, need not be cited. Or that an idea from an instructor's lecture is automatically common property. You must evaluate all sources in the same way and **cite them as necessary.**

Forms of citation

You should generally check with your instructors about their preferred form of citation when you write papers for courses. No one standard is used in all academic papers. You can learn about the three major forms or styles used in most any college writing handbook and on many Web sites for college writers:

- The Modern Language Association (MLA) system of citation is widely used but is most commonly adopted in humanities courses, particularly literature courses.
- The American Psychological Association (APA) system of citation is most common in the social sciences.
- The Chicago Manual of Style is widely used but perhaps most commonly in history courses.

Checklists for revision & editing

When you revise...

☑Check the assignment: does your paper do what it's supposed to do?

☑Check the title: does it clearly identify the overall topic or position?

☑Check the introduction: does it set the stage and establish the purpose?

☑Check each paragraph in the body: does each begin with a transition from the preceding?

☑Check organization: does it make sense why each topic precedes or follows another?

☑Check development: is each topic fully explained, detailed, supported, and exemplified?

☑Check the conclusion: does it restate the thesis and pull key ideas together?

When you edit...

☑Read the paper aloud, listening for flow and natural word style.

☑Check for any lapses into slang, colloquialisms, or nonstandard English phrasing.

☑Check sentence-level mechanics: grammar and punctuation (pay special attention to past writing problems).

☑When everything seems done, run the spell-checker again and do a final proofread.

☑Check physical layout and mechanics against instructor's expectations: Title page? Font and margins? End notes?

Key takeaways

- A writing course is central to all students' success in many of their future courses.
- Writing is a process that involves a number of steps; the product will not be good if one does not allow time for the process.
- Seek feedback from classmates, tutors, and instructors during the writing process.
- Revision is not the same thing as editing.
- Many resources are available to college writers.
- Words and ideas from sources must be documented in a form recommended by the instructor.

Other kinds of writing in college classes

Everything about college writing so far in this chapter applies in most college writing assignments. Some particular situations, however, deserve special attention. These include group writing projects and writing in an online course.

Group writing projects

College instructors sometimes assign group writing projects. The terms of these assignments vary greatly. Sometimes the instructor specifies roles for each member of the group, but often it is part of the group's tasks to define everyone's role. Follow these guidelines:

- Get off to an early start and meet regularly through the process.
- Sort out your roles as soon as you can. You might divide the work in sections and then meet to pull those sections together. But you might also think more in terms of the specific strengths

and interests each of you bring to the project. For example, if one group member is an experienced researcher, that person might gather and annotate materials for the assignment. You might also assign tasks that relate to the stages of the writing process. For example, one person for one meeting might construct a series of questions or a list of points to be addressed, to start a discussion about possible directions for the first draft. Another student might take a first pass at shaping the group's ideas in a rough draft. And so on. Remember that whatever you do, you cannot likely keep each person's work separate from the work of others. There will be and probably should be significant overlap if you are to eventually pull together a successful project.

- Be a good citizen. This is the most important point of all. If you are assigned a group project, you should want to be an active part of the group's work. Never try to ride on the skills of others or let others do more than their fair share. Do not let any lack of confidence you may feel as a writer keep you from doing your share. One of the great things about a group project is that you can learn from others. Another great thing is that you will learn more about your own strengths that others value.
- Complete a draft early so that you can collectively review, revise, and finally edit together.

Writing in online courses

Online instruction is becoming more and more common. All the principles discussed in this chapter apply also in online writing—and many aspects are even more important in an online course. In most online courses, almost everything depends on written communication. Discussion is written rather than spoken. Questions and clarifications take shape in writing. Feedback on assignments is given in writing. To succeed in online writing, apply the same writing process as fully and thoughtfully as with an essay or paper for any course.

Chapter review

- Successful writers in all contexts think of writing as
  - a process,
  - a means to learn,
  - a social act.
- Paying close attention to the terms of the assignment is essential for understanding the writing approach the instructor expects and for shaping the essay.
- Using the writing process maximizes the mental processes involved in thinking and writing. Take the time to explore prewriting strategies before drafting an essay in order to discover your ideas and how best to shape and communicate them.

- Avoid the temptation, after writing a draft, to consider the essay "done." Revision is almost always needed, involving more significant changes than just quick corrections and editing.
- Virtually all college writing builds on the ideas of others; this is a significant part of the educational experience. In your writing, be sure you always make it clear in your phrasing and use of citations which ideas are your own or common knowledge and which come from other sources.
- College writing extends throughout the curriculum, from your first writing class through to your last term, including writing in class on examinations, group projects, and online courses. Through all this great variety of writing, however, the main principles of effective writing remain consistent. Work to develop your college writing skills at this early stage, and you will be well served throughout your education and into your career thereafter.

Assignment 2c

Answer the following five questions, then submit them to Canvas under Assignment 2c:

1. My worst writing habits have been what?
2. To overcome these bad habits in college, I will take what steps?
3. Sentence-level mechanics: Generally, what specific errors (things my past teachers have marked) have you made in your writing?
4. How can you learn to correct errors like these when proofreading and editing?

FEEDBACK

Tap on the thumbnail above to leave feedback for your professor.

Chapter 3

Language

After reading this chapter, students should be able to do the following:

1. **Recognize the complexity of language.**
2. **Identify meanings of language.**
3. **Explain the functions of language.**
4. **Differentiate the definitions of language.**

The meaning & definition of language

Reasoning involves thinking. Thinking, in turn, involves language, for without language we could not express (and probably not even have) any thoughts. In order to understand reasoning, therefore, it is necessary to pay careful attention to the relationship between thought and language. The relationship seems to be straightforward: thought is expressed in and through language. But this claim, while true, is an oversimplification. People often fail to say what they mean. Everyone has had the experience of having their words misunderstood by others. And we all use words not merely to express our thoughts, but also to shape them. Developing our critical thinking skills, therefore, requires an understanding of the ways in which words can (and can fail to) express our thoughts.

The complexity of language

Language is an extremely complex phenomenon. The number of different words in any language is finite, but these words can be used to generate an infinite number of different sentences with different meanings. Many of the ordinary things we say every day have never been said before by anyone. For example: Professor Sutherland reminds me of my Uncle Tony; they both have the habit of running their fingers through their hair when they are thinking hard.

It is likely that when this sentence was first written it had never before been said. And it is not just the precise wording that is unique. It is unlikely that anyone has ever had the same thought. In fact, there is no limit to the number of new sentences with new meanings that could be created. Conversely, there are often different ways of saying the same thing. For example: Anne is older than everyone else in the room. Everyone else in the room is younger than Anne.

In addition, there are often many different sentences that mean more or less the same thing. One lexicographer has recorded over twenty-two hundred synonyms for the word drunk.

Written and spoken language, although closely connected, are nevertheless not identical: spoken language is more flexible (and hence more complex) than written language, for we can change the meaning of words and sentences through our gestures, tone of voice, and facial expressions.

Note the different meanings that arise when the bold word is emphasized in the following sentences:

You shouldn't steal library books. (But it may be acceptable for others to do so.)
You **shouldn't** steal library books. (But I won't be surprised if you do.)
You shouldn't **steal** library books. (But defacing books is acceptable.)

You shouldn't steal **library** books. (But stealing books from the bookstore is acceptable.)
You shouldn't steal library **books**. (But stealing magazines from the library is acceptable.)

Understanding spoken language, therefore, requires much more than knowing the written language. In fact, the close connection between written and spoken language that exists in European languages is sometimes absent in other languages. Chinese spoken dialects (which are as different from one another as English and German) all use the same written language, so that people who speak different dialects can communicate through writing even though they may not understand each other's speech.

Language is always in a state of gradual change, in ways that are in large part unpredictable even in principle. A single language can, in a few centuries, evolve into two languages so different from one

another that those who speak one will find the other incomprehensible. Surprisingly, when languages evolve, they do not evolve into more complex forms, for the complexity of all natural languages seems to remain more or less constant. So-called primitive languages may have

somewhat smaller vocabularies than modern languages (although we need to remember that the Inuit have eleven different words for the different kinds of snow), but in other respects they are just as complex. "Primitive" languages are not really primitive at all.

Given this complexity, it is astonishing that we learn almost everything we will ever know about language before we are old enough to go to school. We are all intimately familiar with at least one language, and we therefore understand what language is, at least in the sense of knowing how to use language. But at a deeper level most of us have only the most elementary understanding of what language is and how it works. Even linguistic theorists are uncertain about many features of language. They do not know, for example, whether the basic structure of language (i.e., its underlying grammar) reflects certain characteristics of the human mind, or is merely conventional in nature. Nor do they fully understand the relationship between language and thinking: we normally use a language when we think, but is language necessary for human thought? And if it is, do people who think in different languages think differently? When we translate a speech from Russian into English, can we be sure that we understand exactly what it meant to the original speaker or what it means to a Russian audience? The relationship between language and reality is also problematic. Does language describe the world as it really is, or do we use language to impose a structure on our experience, experience that would otherwise be chaotic and meaningless?

The meaning of language

Usually it is not difficult to explain what a particular word or sentence means. But there is much that is puzzling about the nature of meaning itself. How do words get their meaning, and how do meanings change? Is the meaning that words have different from the meaning of sentences? In order to enhance our understanding of the nature and complexity of meaning, we will look briefly at three theories of meaning. The first two are commonsense views that have been held by many people, including many philosophers and linguistic theorists. Unfortunately, both are open to serious objections, and many philosophers now regard them as untenable. The third theory avoids the weakness of the first two.

The reference theory of meaning

The reference theory of meaning was first expounded by Aristotle in the fourth century BC. According to this view the meaning of a word consists in what it refers to. The word dog refers to all the dogs in the world, so it seems plausible to hold that the meaning of dog is all the dogs in the world. After all, if we know what dog refers to we obviously know what the word means. Similarly, the meaning of tree is every tree in the world, the meaning of automobile is every automobile, the meaning of joke is every joke, and so on. The meaning of a term thus consists of its reference class, that is, the class of objects to which the word refers. At first glance, the reference theory is a plausible account of meaning,

and its plausibility is enhanced by the fact that pointing to the reference class is often a good way of explaining the meaning of a word. If you don't know what antimacassar means I can easily explain its meaning by pointing to an antimacassar, and explaining that other antimacassars vary in size and design but are essentially the same as this one.

There are, however, serious difficulties with the reference theory. At the heart of the theory there seems to be a confusion between understanding the meaning of a word, and having knowledge of what the word refers to. When we understand the meaning of the word dog, we usually have knowledge of only a small proportion of the dogs that exist, and this is puzzling if the meaning of dog is the reference class of the term. The fact that even small children can understand the meaning of dog on the basis of direct knowledge of only a few dogs cannot be explained by the reference theory. The theory encounters even more serious difficulties, however, when we consider words that have no reference class. What do the following words refer to: unless, after, yes, unlikely, the, nevertheless, was, if, where? Does it even make sense to suggest that the meaning of unless is the class of unlesses? In addition, there are certain phrases whose meaning is easily understood but whose reference is unknown. For example, we all understand the meaning of the phrase the oldest man in the world, even when we don't know to whom it refers. If the meaning is the reference, then we shouldn't be able to understand what the phrase means unless we know who is the oldest man in the world. The reference theory of meaning, therefore, has to be rejected.

The idea theory of meaning

The idea theory of meaning was developed by John Locke in the seventeenth century. He held that the meaning of a word consists of the idea or mental image that is associated with the word. When we think of the word dog, it seems that we have a mental image we associate with the word, and it is plausible to hold that the meaning of dog is this image in our minds. This theory seems to be able to deal with phrases like the oldest man in the world, since it is plausible to suggest that we have a mental image we associate with this phrase. But the idea theory also encounters several difficulties. Just as the class of unlesses seems to make no sense, the mental image of unless also seems to make no sense. But in addition, the image or idea we associate with a word like dog turns out on reflection to be very unclear. If we attempt to describe our image of a dog, we can only describe a typical dog: one that is black, shorthaired, about eighteen inches high, with a short tail, etc. Of course, we know that many dogs are not black, that some are longhaired, that some are very small and some are very large, and so forth. But we cannot have an image of a dog which is both black and not black, both longhaired and shorthaired, and both tall and short. It is impossible for our image of a dog to include all those

characteristics that we know dogs have. How, then, can our image be the meaning of the word?

Another difficulty with the idea theory is that it has the consequence that we can never know what another person means by certain words. You can never see my mental images and I can never see yours. If the mental image is the meaning, how can I know what you mean by dog and how can you know what I mean by dog? One reply to this objection is that we can describe our mental images in words that others can understand, and in this way we can know what others mean by a word. This reply is adequate for some words, but not for all. The mental images we have for simple properties (for example, properties such as red, hot, sour, etc.) can never be stated. We simply cannot describe the meaning of the word red by using other words. If we could, then someone who has been blind since birth would know what red means merely by hearing a description of our mental image, which is impossible. Words fail us at this point. So the idea theory must also be rejected.

Meaning as use

A new approach to meaning was developed in this century by Ludwig Wittgenstein (1889–1951) and John Austin (1911–1960). They recognized that many words do refer to things, and that many words have a mental image or idea associated with them, but they held that the primary bearers of meaning are not words but sentences. Words have meaning only when they are used in sentences: without such a context they have no meaning. When we ask what some particular word means, we seem to be asking for the meaning of the word itself, as if it had a meaning apart from the way it is used in sentences. In fact, the only meaning a word can have is the meaning it gains from the meanings of the sentences in which the word is typically used.

Notice how the different meanings of a word are expressed by using that word in different sentences:

- I gave him a hand with his baggage. (i.e., help) The crowd gave him a hand. (i.e., applause) Please hand me the scissors. (i.e., give)
- She is a green lawyer. (i.e., inexperienced)
- He is looking green. (i.e., nauseous)
- We had a green Christmas last year. (i.e., without snow)
- Don't strike that child. (i.e., hit)
- The strike was over wages. (i.e., refusal to work) Strike three! (i.e., the batter is "out")

But if the meaning of sentences is primary and the meaning of words is derivative — if we cannot derive the meaning of a sentence from the meanings of the words it contains — how are we to account for the meaning of sentences? Wittgenstein and

Austin held that the meaning of sentences is to be found in their use. Language is a tool, and just as we don't really know what a hammer is until we know what its use is, so we don't know what language means until we know what it is being used to do. In order to know what a particular sentence means we need to ask, What is this speaker, in this particular context, using this sentence to do? If someone says Hold it, we cannot know what the sentence means until we know what the speaker means, and we cannot know what the speaker means until we know what he or she is using the sentence to do. Did the speaker say Hold it to get someone to stop doing something, or to instruct someone to grasp hold of an object? Only when we have answered this question will we know what the sentence means.

It is important to pay attention to the **context**, for the context typically gives us the clues we need to determine what the speaker is using a sentence to do, and thus what the sentence means. There are various contextual features we can make use of, such as the social setting, the speaker's personal goals, the nature and expectations of the audience, and what has just been said by other speakers. Changing the context of a sentence can sometimes dramatically affect its meaning. For example: The queen is in a vulnerable position: (a) when said by a spectator at a chess match and (b) when said by a teacher in a lecture on the role of the monarchy in Britain. The President has been shot and died a few minutes ago: (a) when said by a character in a film and (b) when said by a radio announcer in a news broadcast.

More commonly, however, context affects meaning in less dramatic but equally important ways. Usually, there are only a few possible uses of a sentence in any particular context, and we can make a reasonable judgement of its primary or intended use. It is important, therefore, to understand the various uses or functions of language.

The main functions of language

Whenever we use language we do so for some purpose, and if we consider these purposes we can see that there are several different types. Language, in other words, has several functions. Language is often characterized as a means of communication, and although this view is correct, it is not very informative. When we use language, we almost always communicate something to someone, but usually our purpose is much more specific, and frequently we are not primarily concerned with communicating information at all. Our purpose is usually not merely to communicate, but to communicate for a specific purpose. What we mean often reflects these purposes. Consequently, how we interpret, and therefore react to, what others say depends upon what we take their purpose to be. It is therefore important to be aware of the main purposes for which language is used and how these purposes affect meaning. Each of these purposes reflects a different function of language.

1. Descriptive

One very important function of language is to describe (i.e., to convey factual information about) something. Whenever we describe something — an object, a situation, or a feeling — we are stating facts, or what we believe to be facts. For example: This coffee is cold. I don't have any change for the coffee machine. A cup of coffee would calm my nerves.

Almost every time we use language we convey factual information, even though this may not be our primary purpose.

2. Evaluative

Often we use language not (or not merely) to describe something but to make a value judgement about it, that is, to evaluate it. For example: Ellen is the best student in the class.

This is different from a mere factual description, for it presents a value judgement about Ellen. There are several different types of evaluations: aesthetic, moral, economic, technological, and even scientific. For example:That was the worst movie I've seen in years. He is an irresponsible person. The best way to get rich is by investing in real estate. The safest way of disposing of uranium waste is to bury it in old coal mines. The theory of evolution provides the best account of the origin of biological species.

3. Emotive

Language is sometimes used to express emotions, and thus has an emotive function. When you hit your thumb with a hammer, you probably say something. If you say, My thumb hurts, you are describing your feelings. If you say, This is a terrible hammer, you are evaluating the hammer. But if, like most people, you say, Damn! (or worse), you are not describing or evaluating anything but are simply expressing your feelings or emotions. Almost any emotion can be expressed in words.

For example: I love you. You are a loathsome creature; go away. I shall die of unrequited love.

Thank heavens that's over.

Note that these sentences also convey factual information about the speakers' feelings, but in most contexts this function would be secondary.

4. Evocative

Language can also used for the purpose of evoking certain emotions in an audience. If we want someone to feel sad about something we can try to evoke that emotion through the careful choice of words and images. Poets are especially concerned with this function of language. Consider, for example, the line from T.S. Eliot's ''The Love Song of J. Alfred Prufrock," which beautifully evokes the feeling of a meaningless life: I have measured out my

life with coffee spoons. Again, W.B. Yeats, in "The Lake Isle of Innisfree," evokes a feeling of peacefulness:

And I shall have some peace there, for peace comes dropping slow.

Advertisers frequently use language to evoke certain feelings. For example: At Speedy you're a Somebody.

And everyone from time to time wants to evoke certain emotions in their audience. We want others to feel pity for someone, to feel anger at some situation, or to approve of something, and we use language for this purpose. Threats are usually intended to evoke fear in the victim. Political speeches are often aimed at making voters feel that a government is trustworthy, or untrustworthy. Sermons often are designed to make us feel ashamed of the mean things we do.

5. Persuasive

One of the most widespread uses of language is to persuade people to accept something or to act in a certain way. For example: You shouldn't take astrology seriously. There is no scientific basis for it. I know you don't like parties, but I hope you'll come anyway. There will be several people there that you have been wanting to meet. I know you will enjoy yourself once you get

We try to persuade people to recycle waste, that the government's budget is likely to increase unemployment, that the police officer should not give us a speeding ticket, or that lotteries are a waste of money. Every argument is an example of the persuasive use of language. There are two ways language can be used to persuade. Sometimes our purpose is to persuade by means of rational arguments, even if we often fail to achieve our purpose. But often we abandon this restriction and use anything we think might succeed in persuading our audience. This is the case with propaganda and most advertising.

6. Interrogative

In order to elicit information we usually need to ask for it. Most often this is done by asking a question. For example: What is the due date for the essay? But asking questions is not the only way to elicit information. For example: Tell me your age. I won't lend you twenty dollars unless you explain why you need it.

Whatever form of words we use, we are not describing, evaluating, expressing, or evoking anything, or attempting to persuade, but seeking to gain information.

7. Directive

We sometimes use language to tell others to do something. For example: Go to the principal's office immediately. Take these pills twice a day.

These sentences would normally be used to tell someone to do something. They do not describe or evaluate anything, express or evoke an emotion, seek information, nor, usually, do they attempt to persuade us of anything. They simply tell us what to do. The directive use of language covers ordering, commanding, directing, advising, requesting, and similar types of actions.

8. Performative

There is a small but interesting class of sentences that are known as performative utterances, i.e., utterances that are not descriptions, evaluations, directives, and so on, but are themselves to be regarded as actions. They are actions that consist of saying certain words. If a question arises of whether someone actually performed such an action, the only relevant evidence would consist of showing that the person uttered certain words under appropriate circumstances. For example: I find the accused guilty of murder.

If these words are uttered by Judge Bean at the conclusion of a trial they constitute the action of finding someone guilty of murder. If someone asks for proof that Judge Bean found the accused guilty of murder it would be sufficient to quote the judge's words. It would make no sense to suggest that Judge Bean might have been mistaken or lying. If he said the words at the conclusion of the trial then he did find the accused guilty of murder. On the other hand, if I say, Judge Bean found the accused guilty of murder, I could not appeal to the fact that I said it as proof that it is true, since I might be mistaken or lying. It is not a performative utterance, but a description: it is true only if it correctly states or describes a fact. Similarly, if after the trial Judge Bean says, I found the accused guilty of murder,

this would not be a performative utterance, for we could not appeal to the fact that Judge Bean uttered this sentence as proof that it is true, since he might be mistaken or lying.

Here are two more examples of performative utterances:

I now pronounce you husband and wife. I resign, here and now.

When uttered under the appropriate circumstances, each would constitute an action.

9. Recreational

Finally, we should not overlook the fact that language is often used to amuse ourselves and others. We tell jokes and stories, write novels, invent puns, do crossword puzzles, play guessing games, make up limericks, sing nursery rhymes, and write rude things on washroom walls. When language is used in any of these ways it serves a recreational function. People who tell jokes, write stories, or sing nursery rhymes usually do so out of simple enjoyment.

Assignment 3a

Choose and answer two (2) of the questions from "SelfTest" and two (2) of the questions from "Questions for Discussion." Then, submit your answers to the four (4) questions to Canvas under Assignment 3a.

SelfTest

Using the contextual clues provided, what is the most likely primary purpose of the speakers of the following sentences?

1. If you want to succeed in life you need a good education. (Said by a father to his seventeen-year-old daughter who has just told him she wants to drop out of school.)

Definition

We noted that words often have more than one use or meaning. It is important to understand that not all the different uses of a word need have anything in common; for some words there may be a common element, but for many there is not. As long as we know how to use a word for some particular purpose, we know what the word means when used in that sense. Indeed, it is often difficult to enumerate all the different accepted uses of a word. But this is not a problem for the meaning as use theory, for it denies that words must have a single meaning. Since words typically have several different uses, it follows that there will be several different meanings, and as long as we understand a particular use (i.e., know how to use the word for that purpose) we understand the meaning of the word when used in that way.

We have seen that the meaning of language depends upon its use and context, and that it is often difficult to say precisely what a word means if we ignore its use and context. Normally this is not a serious difficulty, for we can usually get by with a rough idea of what words mean as long as they are being used in ordinary contexts. But sometimes this casual approach is inadequate, and it becomes important to focus on the precise meanings of a word. When a lawyer explains what constitutes an assault, or a sales clerk says the microwave oven has a warranty, or a scientist talks about energy, we run the risk of misunderstanding if we fail to pay careful attention to the precise meanings of their words. These are the kinds of occasions when definitions are important; without them we may misunderstand what is being said. Of course, we also need definitions when we come across a word we are unfamiliar with, or when a familiar word is being used in an unfamiliar way. In these cases, it is not misunderstanding that we want to avoid, but not understanding at all.

To understand how definitions work we need to note the distinction between the sense of a term (sometimes called its connotation or intension) and its reference (or denotation or extension). The sense of a word is what we understand when we

understand its meaning, and the reference is the class of things to which the word refers. The sense of the term bachelor, for example, is the concept of an unmarried male, and the reference of the term is the class of all bachelors in the universe, not only those who now exist but those who have existed in the past and may exist in the future. All words must have a sense, although some words have no reference. Words with no reference, however, are quite rare and, as we saw, pose special difficulties.

The purposes of definition

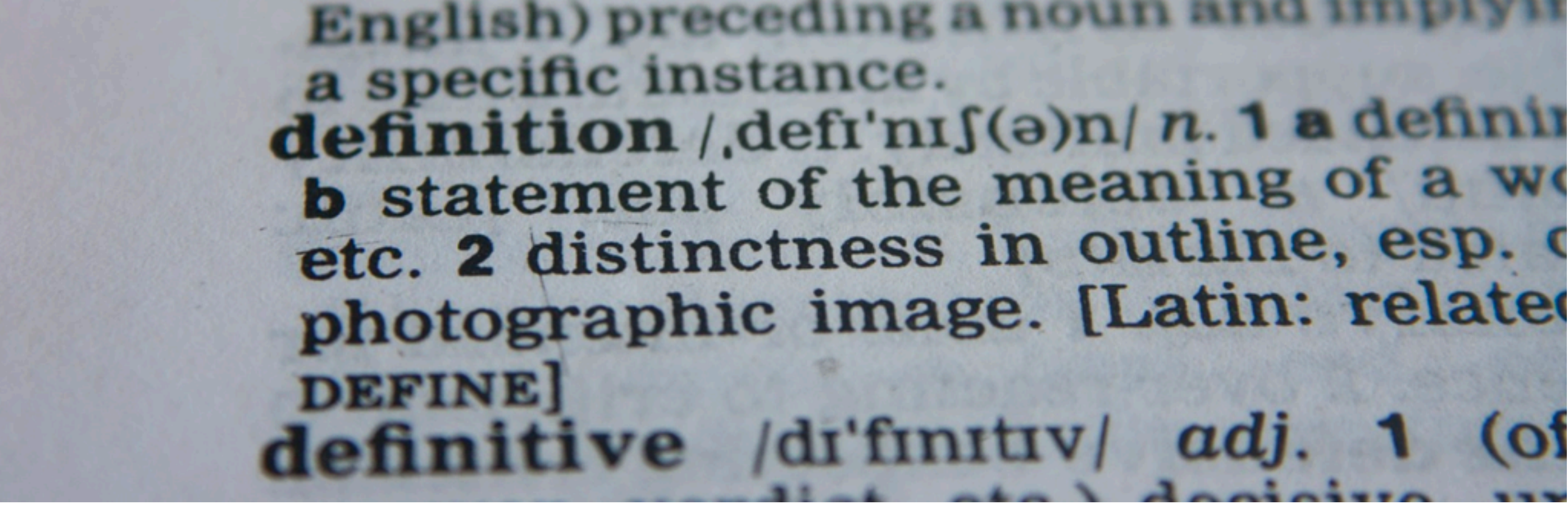
In order to understand how definitions work, we need to be aware of the different purposes for which definitions may be put forward. There are three main types.

1. Reportive definitions

The most common purpose of definitions is to convey the information needed to use a word correctly. The correct use of a word consists of its standard usage — how the word is in fact used by those who make regular use of it. When we want to know the meaning of a word in its standard usage, we need a reportive definition, i.e., one that reports its standard usage. Dictionaries always give reportive definitions. Reportive definitions can sometimes be troublesome because it may not be clear whether or not a particular use can be regarded as part of the standard usage. For example, fifty years ago the word cohort was standardly used only to refer to a group of persons banded together. (This reflected its original meaning in Latin, where it referred to a military unit roughly akin to a platoon.) Now, however, it is usually used to refer to a friend or associate. The sentence Fred arrived with his cohort, if used to mean that Fred arrived with his friend, would have been incorrect fifty years ago, but is now usually accepted as correct. This shift in meaning was probably brought about by people who did not understand the old usage, and who were therefore using the word incorrectly, but the mistake has become so widespread that it is no longer regarded as incorrect. Only dedicated linguistic reactionaries continue to regard the new usage as incorrect. Except for cases where a meaning shift has not yet been accepted as standard usage, however, reportive definitions are usually quite straightforward.

1. Stipulative definitions

Sometimes it is useful to be able to fix a particular meaning for a word. Someone who is writing a report on land use in Ontario would find it necessary to define the categories of land use that are being employed. The report would therefore stipulate how the words agricultural, residential, industrial, recreational, and so forth are being used. When we do this we are not attempting to report the standard usage, although it would clearly be foolish to depart radically from it. For many specific purposes, such as doing research or enacting legislation, it makes good sense to stipulate the precise meaning that is to be attached to key words. As long


English) preceding a noun and implyi
a specific instance.
definition /ˌdefɪˈnɪʃ(ə)n/ *n.* **1 a** definit
b statement of the meaning of a wo
etc. **2** distinctness in outline, esp. c
photographic image. [Latin: relate
DEFINE]
definitive /dɪˈfɪnɪtɪv/ *adj.* **1** (of

as this stipulated meaning is explicitly stated, there is no risk of misunderstanding, and there is an obvious gain in clarity and precision.

There is nothing to prevent us from inventing a new word by using a stipulative definition. For example, we might invent the word spinge to refer to the deposit that builds up between the bristles on a toothbrush, or the word telerape to refer to obscene telephone calls. We can also stipulate a new meaning for an old word: for example, using bubble to refer to a promise made by a politician. There is, however, no guarantee that these new words or uses will become part of the standard usage. This is likely to happen only when there is a need (or a perceived need) for the new term. If enough people think it is important to be able to talk about a new object or phenomenon or to refer to something in a new way, then a new word will usually be forthcoming, and will soon become part of standard usage. Until this happens, however, new words depend for their meaning upon stipulative definitions.

1. Essentialist definitions

Some words — such as justice, truth, love, religion, freedom, deity, death, law, peace, health, and science — refer to things or qualities that have considerable importance. When we ask What is justice? we are not asking for a reportive definition, since such a definition might reflect a widespread misconception about the essential nature of justice. Nor would we be asking for a stipulative definition, since we can invent these for ourselves as

easily as the next person. We are asking for a definition that reveals the essential nature of justice.

The correctness of an essentialist definition cannot be determined merely by an appeal to standard usage, like a reportive definition, nor by an appeal to its usefulness, like a stipulative definition. Essentialist definitions really need to be understood as compressed theories; they attempt to express in succinct form a theory about the nature of what is being defined. Thus, assessing an essentialist definition involves assessing a theory, and this goes far beyond questions about the meaning of words.

These three purposes of definition are important since when we want to determine whether a definition is acceptable we must first decide its purpose. Good stipulative definitions and good essentialist definitions are usually inadequate reportive definitions, and good reportive definitions are usually unsatisfactory essentialist definitions.

Methods of definition

There are several different methods that can be used to define words. These methods can be used for reportive, stipulative, and essentialist definitions.

1. Genus/species

The most common method of defining a word is to refer to a class (i.e., a genus) of which the term is a member and to specify how it is different from other members of the class (i.e., the species). For example: A seaplane is an airplane that is adapted for landing on and taking off from a body of water.

The definition states that a seaplane is a member of the class of airplanes (i.e., it is a type of airplane) that is distinguished from other airplanes by being adapted for landing on and taking off from a body of water.

Most words can be defined using the genus species method. Some, however, cannot because they lack a genus of which they are a member. A seaplane is a member of the class of airplanes; an airplane is a member of the class of machines; a machine is a member of the class of . . . ? At this point we have to look hard to find an appropriate class. We might use the class of systems: A machine is a system of interacting parts. But then what is the appropriate class for systems? At some point, the process of finding a genus class must end, and at this point we can no longer use the genus species method.

2. Ostensive

Sometimes the meaning of a word can easily be conveyed by giving examples, either verbally or by pointing. If someone wants to know what a bassoon is, it may be sufficient to hold one up and say, Here is a bassoon. Or we may point one out by saying, The bald guy in the third row of the orchestra is playing a bassoon. Sometimes it is necessary to give several examples in

order to ensure that the meaning is clear. If we try to define vehicle ostensively, we will need to point to more than cars: we will also need to point to vans, trucks, busses, tractors, motorcycles, bicycles, and so on. If the range of examples given is too limited, we will have conveyed only part of the meaning of the term.

Using ostensive definitions for general terms can be problematic. If we attempt to define ostensively terms such as fairness or truth, it may be difficult for someone to grasp what the different examples have in common. For some words it is difficult to point to or give examples: for example, neutron, space, or history. And words that have no reference (for example, very, where, and forever) simply cannot be defined ostensively because there is nothing to point to.

3. By synonym

Often all that is needed to define a word is to give a synonym. For example: Effulgent means the same as radiant.

Obviously, this method only works for words that have more or less exact synonyms. Words that lack a synonym have to be defined using one of the other methods. And, of course, such definitions will only be helpful for someone who understands the meaning of the synonym.

4. Contextual

Some words can best be defined by using the word in a standard context and providing a different sentence that does not use the word but has the same meaning. For example, the concept of logical strength used in this book can be defined as follows:

This argument has logical strength means the same as The premises of this argument, if true, provide a justification for believing that its conclusion is true.

5. Operational

Sometimes it is important that terms be defined very precisely. In science, for example, it is essential that each concept be defined in a way that specifies exactly when it can be applied and when it cannot. One way of achieving such precision is to establish a rule that the term is to be applied only when a specified test or operation yields a certain result. For example: A genius is anyone who scores over 140 on a standard I. Q. test.

Operational definitions are commonly used outside science when defining terms that are used to distinguish things that form a continuum, such as the quality of meat, student performance, or degree of drunkenness. Thus we have operational definitions for such terms as Grade A beef, honours standing, and legal intoxication. Operational definitions often arise initially as stipulative definitions, but may become part of the standard usage.

Assessing reportive definitions

A good stipulative definition is one that fixes a precise meaning of a term in a way that will be useful for some specific purpose. A good essentialist definition is one that reflects a true or reasonable theory about the essential nature of the phenomenon to which the term refers. But what is a good reportive definition? The short answer to this question is that a good reportive definition of a word is one that tells us what others mean when they use the word and what others will understand us to mean when we use it. In other words, it will accurately describe the actual standard usage of the term. There are several ways in which a reportive definition can fail to be a good definition

Too broad

A definition is too broad when the defining phrase refers to some things that are not included in the reference of the term being defined. The definition A typewriter is a means of writing fails as a definition because the defining phrase (a means of writing) refers not only to typewriters but also to chalk, pens, and pencils, among other things. The definition is too broad because it includes more than it should. Here are some other examples of definitions that are too broad:

Soccer is a game played with a ball.

A beaver is an amphibious rodent, native to northeastern North America.

A sofa is a piece of furniture designed for sitting.

If we regard these not as definitions, but as statements, they are all true. Soccer is, obviously, a game played with a ball. In a sense, therefore, definitions that are too broad do not say anything that is actually false. It is when such statements are put forward as definitions that problems may arise.

Too narrow

A definition is too narrow when the defining phrase fails to refer to some things that are included in the reference of the term being defined. The definition

“A school is an institution that aims at teaching children how to read and write” is a bad definition because the defining phrase fails to refer to schools that do not aim at teaching children how to read and write, such as medical schools and dance schools. It is too narrow; it excludes these other kinds of schools. Here are some other examples of definitions that are too narrow:

A parent is a person's mother or father.

A farm is a place where crops are grown.

A bigamist is a man who is married to two women at the same time.

As with definitions that are too broad, definitions that are too narrow do not necessarily say anything that is false. A true statement may be a bad definition.

Too broad & too narrow

A definition can sometimes be too broad and too narrow at the same time. This happens when the defining phrase refers to some things to which the term does not (too broad) and also fails to refer to some things to which the term does (too narrow). For example: A pen is an instrument designed for writing words.

This definition is too broad because it includes pencils and typewriters as well as pens, and it is too narrow because it fails to include pens that are designed for drawing pictures.

In order to determine whether a definition is too broad or too narrow, it is necessary to compare the reference of the term being defined with the reference of the defining phrase. Two questions need to be asked: (1) does the reference of the defining phrase include things that are not included in the reference of the term being defined? If it does, then the definition is too broad. And (2) does the reference of the defining phrase exclude things that are included in the reference of the term? If it does, then the definition is too narrow.

Here are some examples of definitions that are both too broad and too narrow:

Hockey is a game played on ice in Canada.

A doctor is a person who treats physical ailments. A professor is a teacher who does research.

Circular

A circular definition is one that includes the term being defined (or its cognate) in the definition. For example: A golf ball is a small spherical object used in the game of golf.

The problem here is obvious: anyone who does not already know what golf is, is not going to be enlightened by the definition. Circular definitions are therefore usually useless.

When a definition uses a cognate of the term being defined the circularity may be less obvious. For example: A surgeon is a person who practises surgery.

This definition is circular because surgeon and surgery are cognates (i.e., they come from the same root.) Circular definitions involving cognates may not always be useless, however, since a person may know the meaning of one and not the other.

People do not often put forward circular definitions that are as blatant as these examples. But sometimes a pair of definitions, neither of which is itself circular, can lead to a kind of circularity when taken together. If someone defines freedom as the absence of coercion, and then defines coercion as the absence of

freedom, the definitions taken together are circular and therefore likely to be useless.

Obscure

A definition can also be useless when it fails, through the use of vague, obscure, or metaphorical language, to express clearly the meaning of the term being defined. Consider the following definitions:

A marathon is a long footrace.

A grampus is a kind of blowing, spouting, blunt-headed, dolphin-like cetacean. A fact is anything that rubs the corners off our prejudices.

The first of these definitions uses a vague expression (long) that leaves the meaning of the term somewhat obscure. The second uses a scientific term (cetacean) that is likely to be unenlightening (to non-biologists, at least). The third is likely to be uninformative because it uses a metaphor (rubs the corners off). In most circumstances these definitions will be unsatisfactory. However, a definition that uses an obscure technical term may nevertheless be correct (for example, the second of the above definitions), and if we want to have a precise understanding of the term we will have to look for a definition of the obscure term and hope that it is not equally obscure.

A warning

Defining words is an art. It requires good judgement to know what kind of definition is appropriate in any particular context. Compilers of dictionaries attempt to provide definitions that can serve in a very broad range of contexts, but even they make no claim to give a full and complete account of the meanings of words. They do not, for example, attempt to cover slang, dialect, or metaphorical uses.

Most of us are not writers of dictionaries, and we only attempt to provide definitions when a particular need arises. Sometimes we are asked what a word means. A friend asks what the difference is between disinterested and uninterested. A German tourist asks what street means. A child asks what obstetrician means. In such circumstances, there is no need to give a full definition: we need only provide enough information to remove the questioner's ignorance. The friend may only need to be told that disinterested means the same as impartial. The German tourist only needs to be informed that street means strasse. The child will be content if told that obstetrician means baby doctor. The appropriate kind of answer is one that meets the needs of the questioner, and this is usually less than a full reportive definition.

Sometimes, however, we need to define a word because we want to increase or deepen our understanding. This is likely to arise with terms that are abstract or stand for a complex object or phenomenon; we often have a general idea of what they mean

and can point to examples, but find it very difficult to say precisely what they mean.

For most people, the following terms fall into this category: energy, classical, crime, psychiatry, nation, pornography, religion, imagination, evil, illness, cause, and trust. These are important matters, and if we want to increase our understanding of them we must attempt to ensure that we have a clear understanding of the words. But even here we do not usually want a full reportive definition. Often we are interested in only one sense of the word (for example, energy as a scientific term), and sometimes we want only to be able to distinguish between similar things (for example, between psychiatry and psychology).

Assignment 3b

Choose and comment on two (2) of the following from "Questions for Discussion." Then, submit your answers to the two (2) questions to Canvas under Assignment 3b.

Questions for Discussion

1. A psychological disorder is any personal way of perceiving or interpreting events which is used repeatedly in spite of its consistent failure (from G.A. Kelly, *Personality Theory and Research* [Toronto: John Wiley and Sons, 1970], p. 240).

2. The term suicide is applied to all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce his

Clarifying meaning

The failure to understand the meaning of what others say, and the failure to understand how others can misunderstand the meaning of what we say, are the seeds of much frustration, resentment, and discord. In this chapter we examine some of the ways in which misunderstanding can result from a lack of clarity in the language we use. Our purpose here is to develop the ability to recognize obscurity in what others say, and to learn how to say clearly what we mean.

The principle of charity

Often we are confronted by a choice between two or more interpretations of what someone has said, and sometimes these interpretations have different degrees of plausibility. If we adopt the least plausible interpretation it is often easy to show that the statement is false. On the other hand, if we adopt the most plausible interpretation it is usually more difficult to show that the statement is false. It is tempting, therefore, when faced with a statement we disagree with, to adopt the least plausible interpretation of it. After all, if we can get away with foisting an implausible view on our opponents it makes it easier to show that they are wrong (or stupid, irrational, foolish, etc). It is especially tempting to do this when the most implausible interpretation is the literal one. For example:

The worst thing that can happen to a worker in this province is to fall into the clutches of the Workers' Compensation Board.

The only difference between an amateur and a professional musician is that the amateur performs for personal satisfaction while the professional performs for money.

Doctors who perform abortions are guilty of first degree murder.

We all recognize that the literal interpretation of such statements is unlikely to be what the speaker intended. They are exaggerations or overstatements. If the speaker is present we may want to have a bit of fun by pointing out the absurdity of what was actually said. Sometimes this is legitimate; for example, when debating in parliament. However, when there is an important issue at stake we should not let our desire to poke fun at our opponents prevent us from listening to what they are really trying to say. When our opponents are not present and cannot clarify what they have said we ought to be prepared to do so on their behalf. It is up to us to find the fairest interpretation of their words, the one that best represents their presumed intentions.

Thus, in any discussion we have a moral obligation to treat our opponents fairly. When they are present we ought to give them the opportunity to clarify what they have said. When they are not present, we have a moral obligation to follow the principle of charity, that is, to adopt the most charitable interpretation of their words. The most charitable interpretation is the one that makes our opponent's views as reasonable, plausible, or defensible as possible. According to the principle of charity, whenever two interpretations are possible we should always adopt the more reasonable.

Why should we be charitable to our opponents? After all, it might be argued that if the purpose of engaging in a debate is to win, the principle of charity will make our task more difficult. But winning is not the primary purpose of rational discussion. The primary purpose should always be to discover the truth and to develop views and positions that are as reasonable and defensible as they can be. It is always possible that our opponents are right and we are wrong, or that our opponents are partly right and our position needs to be amended in some way; in either case we stand to benefit from discussion. Even if our opponents are totally wrong it is a useful test of the strength of our own position to be able to show their errors. In any case we owe it to our opponents as persons to interpret their words in the most reasonable manner. Anyone who has ever been involved in a discussion with an opponent who persistently violates the principle of charity will understand the unfairness of such treatment and will appreciate the importance of observing the principle.

The principle of charity should be followed not only when we are interpreting single statements, but also when we are interpreting longer passages and even entire books. Throughout this book we

shall often find it necessary to invoke the principle of charity. Being charitable to our opponents should eventually become second nature.

Linguistic ambiguity

Ambiguity & vagueness

Some sentences are ambiguous. Some sentences are vague. But ambiguity and vagueness are not the same. An ambiguous sentence is one that has two or more different but usually quite precise meanings. A vague sentence is one that lacks a precise meaning. Ambiguous sentences should be avoided whenever there is a risk of misinterpretation — whenever there is a risk that the hearer will select the wrong meaning. Vague sentences, however, are necessary if we are trying to express a vague thought or feeling. For example: I don't care much for Beethoven's early string quartets; That was a noisy party they had last night, and it went on until all hours. Lots of people own two television sets; Margaret Laurence's novels have a disquieting effect upon the reader.

These sentences are vague but they are not ambiguous. In most contexts there is no need for greater precision about such matters. If challenged we could easily be a little more precise, but it would be very difficult (and usually pointless) to attempt to remove the vagueness altogether. There is nothing wrong with vagueness when we want to express a vague thought or when there is no need for precision.

In contexts in which precision is needed, however, we sometimes come across sentences that look quite precise, but that turn out to be extremely vague. For example:

Applicants must hold a diploma in early childhood education or have equivalent work experience.

The phrase equivalent work experience sounds quite precise, but without further information it is impossible to tell what kinds of work experience are going to count as equivalent. Does raising three children of one's own count? What about occasional babysitting over a period of six years? A halftime job as a helper in a nursery school for three years? Two years' experience as a kindergarten teacher? Potential applicants need a precise statement of the minimum qualifications for the position, but the sentence fails to provide it.

Those who use vague sentences when precision is needed or who use vague sentences that look precise, should be challenged. Sometimes it is quite easy to see precisely what needs to be challenged. For example:

The fact that the Liberals won more seats than any other party in the last federal election shows that the voters want a Liberal government.

The vagueness here arises with the phrase the voters. We need to ask How many voters? We know that the voters cannot refer to all the voters, since other parties also received votes. Does it mean most of the voters? This may well be the speaker's intent, but if so the claim is false since in fact less than half of the votes cast were for Liberal candidates. The Liberal victory resulted from the multiparty system, not from the support of most of the electorate. This example shows the importance of asking for quantifiers: Do you mean all, most, or just some? and Do you mean always, usually, or just sometimes?

In other cases, however, the vagueness arises from the use of terms that are inherently vague. The cabinet minister who says, “My officials are monitoring this situation very closely, and I can promise that we shall take all appropriate measures to ensure that the situation is resolved in a way that is fair to all the parties involved,” should be challenged on grounds of vagueness. Despite the appearance of having promised to do something specific, the minister has not really promised to do anything at all. What are appropriate measures? They could be anything or nothing. What does fair to all the parties mean? We have no clear idea. Such phrases are inherently vague, and can mean almost anything. People who use them should be challenged to say more precisely what they mean.

It is important to understand that ambiguity and vagueness are properties of sentences and not of the words themselves. This is because words typically have more than one meaning, and the context in which they are used usually tells us which meaning is the intended one. It is the context that makes sentences vague, and it is when the context lets us down that sentences become ambiguous. Of course, the ambiguity or vagueness of a sentence often rests upon the meaning of a word or phrase, but the ambiguity or vagueness arises only at the level of the sentence.

Here are some other sentences that should be challenged on grounds of vagueness, at least in normal contexts:

Essays for this course should be long enough to deal adequately with the assigned topic.

You should sign our petition to protest against the violation of our rights by the government.

If you persist in this course of action, all hell is going to break loose.

Referential ambiguity

Referential ambiguity arises when a word or phrase could, in the context of a particular sentence, refer to two or more properties or things. Usually the context tells us which meaning is intended, but when it doesn't we may choose the wrong meaning. If we are not sure which reference is intended by the speaker, we will misunderstand the speaker's meaning if we assign the wrong (i.e., the unintended) meaning to the word. If someone tells you

that Pavarotti is a big opera star, you will have to guess whether big refers to fat or to famous. Sometimes, however, it is the context that creates the ambiguity. If someone is comparing the merits of two universities and says, It is quite a good university, the context may not tell us which university is being referred to.

Referential ambiguities are usually easy to spot and, once recognized, are easily avoided. This is especially true in conversation, since we can ask for clarification: Do you mean that Pavarotti is fat or famous? Or, if we select the wrong meaning, it will not be long before we discover our mistake: Oh, I thought you meant he was famous! There is, however, one type of referential ambiguity that deserves special mention: that between the collective and the distributive use of a term. Most nouns refer to a class of individual objects: dog, for example, refers to the class consisting of all dogs and book refers to the class of all books. Usually when we use such nouns we do so in order to say something about each and every member of the class. When we use a term in this way it is being used distributively. But sometimes we use terms to say something not about each and every member of the class but about the class as such. When we use a term in this way it is being used collectively. Consider the following:

Our university has a large wrestling team.

If we interpret wrestling team distributively, the statement means that the individual members of the team are large. If we interpret the term collectively, the statement means that the team has a large number of members. Usually the context makes it clear whether a term should be interpreted distributively or collectively, but sometimes it does not and we can mistakenly assume the wrong interpretation.

It is useful to develop the ability to recognize referential ambiguities even when they are unlikely to cause misunderstandings, for then we are less likely to assume a wrong interpretation inadvertently. Here are some more examples of sentences containing referential ambiguities:

Tom gave Ted's skis to his sister.

Harold told me that he would do it next week.

Americans make more telephone calls than Canadians.

The government has provided constant funding for postsecondary education over the last three years.

Grammatical ambiguity

Grammatical ambiguity arises when the grammatical structure of a sentence allows two interpretations, each of which gives rise to a different meaning. A few years ago a British newspaper reported that:

Lord Denning spoke against the artificial insemination of women in the House of Lords.

The grammar makes it unclear whether it was the speech or the insemination that took place in the House of Lords. This is because the phrase in the House of Lords could modify either insemination or spoke. Here are a few examples:

He promised to pay Patrick and Michael fifty dollars to clear all the junk out of the basement and take it to the dump. Ashley strode out of the studio with Nikki following her, saying, ''I'll never give him up."

Olga decided to quit smoking while driving to Toronto.

Jim and I have suffered tremendously; often I wake up in the morning and wish I were dead and I know Jim does too.

Sometimes we come across sentences that are clearly ambiguous, but where it is hard to determine whether the ambiguity is referential or grammatical. Consider the sentence Let me go. If someone grabs your arm in the midst of an argument you might say, Let me go, meaning that you want the person to let go of your arm. If your spouse says that someone is going to have to go out to get some milk for breakfast and you say, Let me go, you are obviously volunteering to go and get some milk. Whether this is a grammatical or referential ambiguity is not important, however, as long as we can recognize that it is ambiguous.

Use & mention

Another type of linguistic ambiguity arises through the failure to distinguish between using and mentioning a word or phrase. Consider the following sentences:

Tom said I was angry. Tom said, "I was angry."

Clearly these sentences have different meanings, even though the words are identical. The difference in meaning arises because the phrase I was angry is being used in the first sentence but is only mentioned in the second. Quotation marks or italics are commonly used to mark the difference. But direct quotation is not the only occasion when we want to mention a word and in these cases we should also use italics or quotation marks to make our meaning clear. For example: Paddy is Irish.

As it stands, this sentence means that a particular person, called Paddy, is an Irishman. But if we put quotation marks around "Paddy" it would mean that "Paddy" is an Irish name. Here are some more examples of sentences whose meaning would change if the word or phrase which is mentioned (as indicated by Capitalized Words or quotation marks) were being used instead:

The Music of the Renaissance is extremely demanding. The word "itself" is hard to define.

"John Smith" was placed on the ballot.

The Joy of Sex costs $24.95.

The ability to detect linguistic ambiguities is an important skill, for undetected ambiguities can create misunderstandings that lead to those frustrating discussions in which everyone seems to be at cross purposes. On the other hand, people who delight in finding linguistic ambiguities that do not in fact mislead anyone may be amusing for a time but can become extremely annoying. Since our interest is in clarifying meaning, we are concerned only with ambiguities that do or may mislead.

Assignment 3c

Choose and comment on two (2) of the following from "SelfTest" prompts. Then, submit your answers to the two (2) to Canvas under Assignment 3c.

SelfTest

1. Billy gave his sisters a box of candy for Christmas.

2. He's a chicken.

3. Melissa only has one dress.

4. General Loses Battle With Nurses. (A newspaper headline)

5. Conversational German is extremely difficult.

Analytic, contradictory & synthetic statements

Usually, when we know what a statement means we still do not know whether it is true or false. If I say, I was born on October 22, you understand the meaning of what I have said, but you do not know whether what I have said is true or false. There are, however, certain statements whose truth or falsity is determined by their meaning. Consider the following statements:

All bachelors are unmarried adult males. Some bachelors are married.

Once we understand the meaning of these statements, we know that the first is true and the second is false. They are true, or false, by definition. We do not need to investigate the facts in order to know whether they are true or false. Someone who tries to discover their truth or falsity by sending a questionnaire to a group of bachelors asking whether or not they were married obviously does not understand the meaning of the statements.

A statement that is true by definition is called an analytic statement. A statement that is false by definition is called a contradictory statement. A statement whose truth or falsity is not solely dependent upon the meanings of the words in it is called a synthetic statement. All statements can be placed in one of these three categories.

These distinctions are useful in clarifying the meaning of certain statements whose meaning is imprecise. When a statement seems false, we can ask whether it is a false synthetic or a contradictory statement. When a statement seems true, we can ask whether it is a true synthetic or an analytic statement. For example, if someone claims that every successful person is wealthy it is useful to know whether they are interpreting the word successful as meaning financially successful. If so, their claim becomes analytic, for it really means that all wealthy people are wealthy. It is usually a waste of time arguing against an analytic statement. In practice, however, people do not usually approach discussions with precise definitions of the key terms. It is when they are challenged — for example, when someone says, I know several very successful poets and artists who are not wealthy — that the temptation arises to define words in a way that makes their claim analytic. Since analytic statements are true by definition, such a move seems to ensure victory in the debate.

But such victories are usually hollow, for analytic statements are always in a sense trivial. Obviously, all successful people are wealthy — if by successful you mean wealthy. But why should anyone think it interesting to claim that all wealthy people are wealthy? It is true, but trivially true. The interesting question in such a debate is whether one should regard financial success as the only kind of success, and this cannot be determined merely by defining words. In practice, people who attempt to win a debate by making their claim analytic usually shift back and forth between analytic and synthetic interpretations in the course of the debate. To show that their claim is true they adopt the analytic interpretation; to show that it is important they adopt the synthetic interpretation. In this way they convince themselves that their claim is both true and important; but the true meaning is trivial and the important meaning is unproven and possibly false.

Sometimes a claim is made into an analytic one in ways that are indirect, and it may take some perseverance to uncover these moves. Usually, these indirect moves arise from arguments that are used to defend a claim. The claim that a free enterprise system is superior to a socialist system, in its most plausible interpretation, is a synthetic statement. But suppose the following argument were put forward to support this claim:

1. In a free enterprise system market forces determine how resources are allocated within the society.
2. It is more efficient to allocate resources through market forces than through decisions by government officials.
3. An efficient system is superior to an inefficient system.
4. Therefore, a free enterprise system is superior to a socialist system.

This is a logically strong argument, in the sense that if the first three statements are true then the conclusion must also be true. The danger arises when attempting to show that premises (2) and

(3) are true. It is all too easy to assume their truth by regarding them as analytic. Premise (2) becomes analytic if it is assumed that an efficient allocation of resources is by definition one that is produced by market forces. Premise (3) becomes analytic if it is interpreted to mean that an economically efficient system is economically superior to an economically inefficient system. But if the premises are interpreted in this way, then the conclusion needs to be re interpreted to mean that a system that allocates resources efficiently is more efficient than one that does not allocate resources efficiently. In this way the conclusion itself becomes analytic. It is true, but trivially so, since its truth depends not on the facts but only on the way the key terms are defined. The real argument will, of course, resurface as an argument about the truth or adequacy of the interpretations of premises 2 and 3.

Descriptive & evaluative meaning

The main uses of language include the first two of these — the descriptive and the evaluative — are probably the most common uses of language, and probably also the most fundamental. As a result, we find that many words have come to have meanings that are both descriptive and evaluative. When someone says that Fritz Kreisler was a renowned violinist, the word renowned has a double meaning. First, it means that Kreisler was well known as a violinist. Second, it means that he was an excellent violinist. The first meaning is descriptive, since it refers to the fact that Kreisler was well known. If there is a disagreement about this fact it can be settled by looking for historical evidence regarding how widely known he was during his lifetime. The second meaning, however, is evaluative; the speaker is giving his or her opinion that Kreisler was an excellent violinist. This opinion is not factual, since if there is a disagreement over whether Kreisler was an excellent violinist it cannot be settled by consulting the facts. Someone who thinks that Kreisler was not an excellent violinist would be able to accept the descriptive meaning but would have to reject the evaluative meaning of our statement.

There are many descriptive words and phrases that also have an evaluative meaning. It is common to find two or more words or phrases that have more or less the same descriptive meaning but different evaluative meanings. We have seen that renowned and well known have the same descriptive meaning, but the former has a positive evaluative meaning that the latter lacks. The word notorious has the same descriptive meaning, but has a negative evaluative meaning. The evaluative meanings of renowned and notorious convey an evaluation of the person as being good or bad, whereas well known conveys nothing about the speaker's evaluation. Notice the shift in the evaluative meanings in the following pairs of sentences while the descriptive meaning remains more or less unchanged:

- He is very self-confident. He is arrogant.
- She is sexually liberated. She is promiscuous.

- He is a dedicated conservative. He is a fanatical conservative.
- They are freedom fighters. They are terrorists.

It is important to be aware of such differences in meaning, since we can sometimes be led to accept a particular evaluation through a failure to distinguish descriptive and evaluative meanings. The facts that would show that someone is very self-confident and the facts that would show that someone is arrogant are very similar, and a skilled arguer can easily create the impression that someone who is self-confident is really arrogant (or vice versa). But the same facts can only be used to justify two statements with different evaluative meanings if the evaluative meaning is ignored and they are regarded as purely descriptive statements. The evaluative part of the meaning requires a separate justification.

Necessary & sufficient conditions

A special kind of ambiguity can arise when talking about the conditions that have to be met in order for something to occur. Referring to such conditions is common when we are talking about the causes (i.e., the causal conditions) of certain events: for example, Under what conditions would a major economic depression occur again? It is also common when we are talking about entitlements or justifications for certain actions: for example, What are the conditions for graduating with distinction? It seems that all we need to do to answer such questions is to list the conditions that, if they existed, would lead to a depression or to graduating with distinction. Unfortunately, the relationships between conditions and what they are conditions for are often a great deal more complex than they seem, and in order to clarify these relationships philosophers and scientists have developed a distinction between two types of conditions, necessary conditions and sufficient conditions. Much confusion and ambiguity can result when these two types of conditions are not clearly distinguished.

To understand the ambiguity that results when the two types of conditions are not distinguished, consider the following:

1. Being at least eighteen years of age is a condition for being eligible to vote in federal elections in Canada.

   This could mean either of the following:

2. Anyone who is at least eighteen years of age is eligible to vote in federal elections in Canada, or

3. Anyone who is not at least eighteen years of age is not eligible to vote in federal elections in Canada.

   These sentences have different meanings. We can see the difference by asking what each says about a particular case, for example, a twenty-seven-year-old prison inmate. According to 2 such a person is eligible to vote, but 3 says nothing about

whether such a person is eligible to vote. In fact the correct interpretation of 1 is 3. By law, every eligible voter must be at least eighteen years of age — that is, if you are not eighteen you can't vote — but the law also states that judges, persons serving prison sentences, and insane persons are not eligible to vote. This means that not everyone who is eighteen years of age is eligible to vote, which means that 2 is false. Being at least eighteen years of age is a condition, but it is not the only condition that has to be satisfied for someone to be an eligible voter. To avoid this ambiguity we should revise 1 to read:

4. Being at least eighteen years of age is a necessary condition for being eligible to vote in federal elections in Canada.

A necessary condition is defined as follows: X is a necessary condition for Y if, and only if, when X is false Y must also be false (or, when X is absent Y cannot occur). In other words, a necessary condition for Y is something whose falsity or absence prevents Y, but whose truth or presence does not guarantee Y. This yields a simple test for the truth of a necessary condition statement: look for an instance of Y that is not also an X. If we can find one such case then the statement must be false, since we have discovered an instance where X is not a necessary condition for Y. If we cannot find such a case then we should accept the statement.

A sufficient condition is quite different from a necessary condition. Consider the following:

(1) Holding a B.A. from the University is a condition for being a member of the University Alumni Association.

This is ambiguous between:

(2) Anyone holding a B.A. from the University is a member of the University Alumni Association, and

(3) Anyone not holding a B.A. from the University is not a member of the University Alumni Association.

Obviously, (2) is the most likely interpretation of (1). Notice the structural difference from our first example, where (3) was the correct

interpretation. This is because here we are dealing with a sufficient condition. A person who holds a B.A. from the University does not need to meet any additional conditions in order to be a member of the University Alumni Association, although obviously holding a B.A. is not the only way one can become a member of the University Alumni Association. To remove the ambiguity we need to revise (1) to read:

(4) Holding a B.A. from the University is a sufficient condition for being a member of the University Alumni Association.

A sufficient condition is defined as follows: X is a sufficient condition for Y if, and only if, when X is true Y must also be true (or, when X is present Y must occur). In other words, a sufficient condition for Y is something whose truth or presence guarantees Y, but whose falsity or absence does not prevent Y. This yields a simple test for the truth of a sufficient condition statement: look for an instance of an X that is not also a Y. If we can find one such case then the statement must be false, since we have discovered an instance where X is not a sufficient condition for Y. If we can find no such case then we should accept the statement.

The essential difference between a necessary and a sufficient condition for some Y is that a necessary condition is something whose falsity or absence guarantees that Y is false or won't occur, and a sufficient condition is something whose truth or presence guarantees that Y is true or will occur.

Sometimes, a condition can be both necessary and sufficient at the same time. Consider the following:

It is a condition for a candidate being declared the winner in an election for the Ontario legislature that the candidate received more votes than any other candidate in the election.

In this example, receiving more votes than any other candidate is a sufficient condition for being declared the winner (since any one who receives more votes than any other candidate must be declared the winner); and it is also a necessary condition (since every candidate who is declared the winner must have received more votes than any other candidate). Another example of this sort is the relationship between Today is Tuesday and Tomorrow is Wednesday. Each of these statements is both a necessary and sufficient condition for the other.

Now, just to make things more complicated, we need to note what can happen when two or more conditions for the same thing are joined together. Being at least eighteen years of age is not the only necessary condition for being eligible to vote in federal elections in Canada; we have already noted that one must not be a judge, a person serving a prison sentence, or an insane person, but in addition one must also be a Canadian citizen. We can set out these necessary conditions as follows:

The necessary conditions for being eligible to vote in federal elections in Canada are: (1) being at least eighteen years of age,

(2) not being a judge, a person serving a prison sentence, or an insane person, and (3) being a Canadian citizen.

These constitute all the necessary conditions for being eligible to vote in federal elections in Canada. But notice that these three necessary conditions are, when taken together, a sufficient condition. This is because any person who satisfies all three of these conditions is eligible to vote. Whenever we can list all the necessary conditions for something we will have listed the conditions that are jointly sufficient conditions.

So far, all our examples have dealt with criteria or entitlements. When dealing with causes, necessary and sufficient conditions work in the same way. When scientists search for a full account of the causes of some phenomenon, they are looking not only for the conditions that are individually sufficient, but also for the conditions that are individually necessary and jointly sufficient. However, if our sole interest is in controlling some phenomenon all we need is a partial account of the causes of that phenomenon. If we want to prevent something from happening we don't need a full account of its causal conditions, since if we can eliminate one necessary condition then we can prevent the event from occurring. For example, if we want to prevent a disease from spreading all we need to do is find and eliminate one of the necessary conditions for the spread of the disease. On the other hand, if we want to produce a certain effect, all we need to do is to find one (or one set) of its sufficient conditions that we can bring about. For example, if we want to lose twenty pounds we need to find only one way (for example, exercise) that works (i.e., is sufficient), and can ignore all the other ways (for example, dieting, diet pills).

Chapter 4

Communication

After reading this chapter, students should be able to do the following:

1. **Discover the mistakes in communication.**

2. **Illustrate the effect of grammar.**

3. **Identify innuendo.**

4. **Examine the complexities of communication.**

This chapter is designed to reveal some of the major pitfalls in normal communication. Usually your goal is to communicate well. You want to be clear, to be precise, and to get the message across with the proper tone. But not always. There are many reasons for not wanting to directly say what you mean. That birthday present from Aunt Bessie deserves a thank you, but you don't want to tell her that the present itself is useless to you. When you insert into your history essay the famous remark "History is a pack of tricks played on the dead," you don't intend to be taken literally. However, this chapter explores the logical aspects of good communication when you do want to say what you mean and mean what you say. This goal is not always easy to achieve.

Not realizing what you are saying

All of us sometimes say things that aren't quite what we mean, but those whose native language is not English have special troubles in this regard. Here are some examples of items written in English by non-native speakers:

• Sign outside a doctor's office in Rome: "Specialist in women and other diseases."

• Bucharest hotel lobby: "The lift is being fixed for the next day. During that time, we regret that you will be unbearable."

• In a Serbian hotel: "The flattening of underwear with pleasure is the job of the chambermaid."

• On the menu of a Swiss restaurant: "Our wines leave you nothing to hope for."

• In a Norwegian cocktail lounge: "Ladies are requested not to have babies at the bar."

(These errors and many others have been circulating widely, but the above list is part of a longer list reported on by Jon Carroll in the San Francisco Chronicle, July 30, 1990.)

You wouldn't make errors like these, would you?

Concept check

You've been hired by a Tokyo car rental firm to revise the following paragraph of its brochure in order to improve the English. How would you rewrite it?

When passenger of foot heave in sight, tootle the horn. Trumpet him melodiously at first, but if he still obstacles your passage then tootle him with vigor.

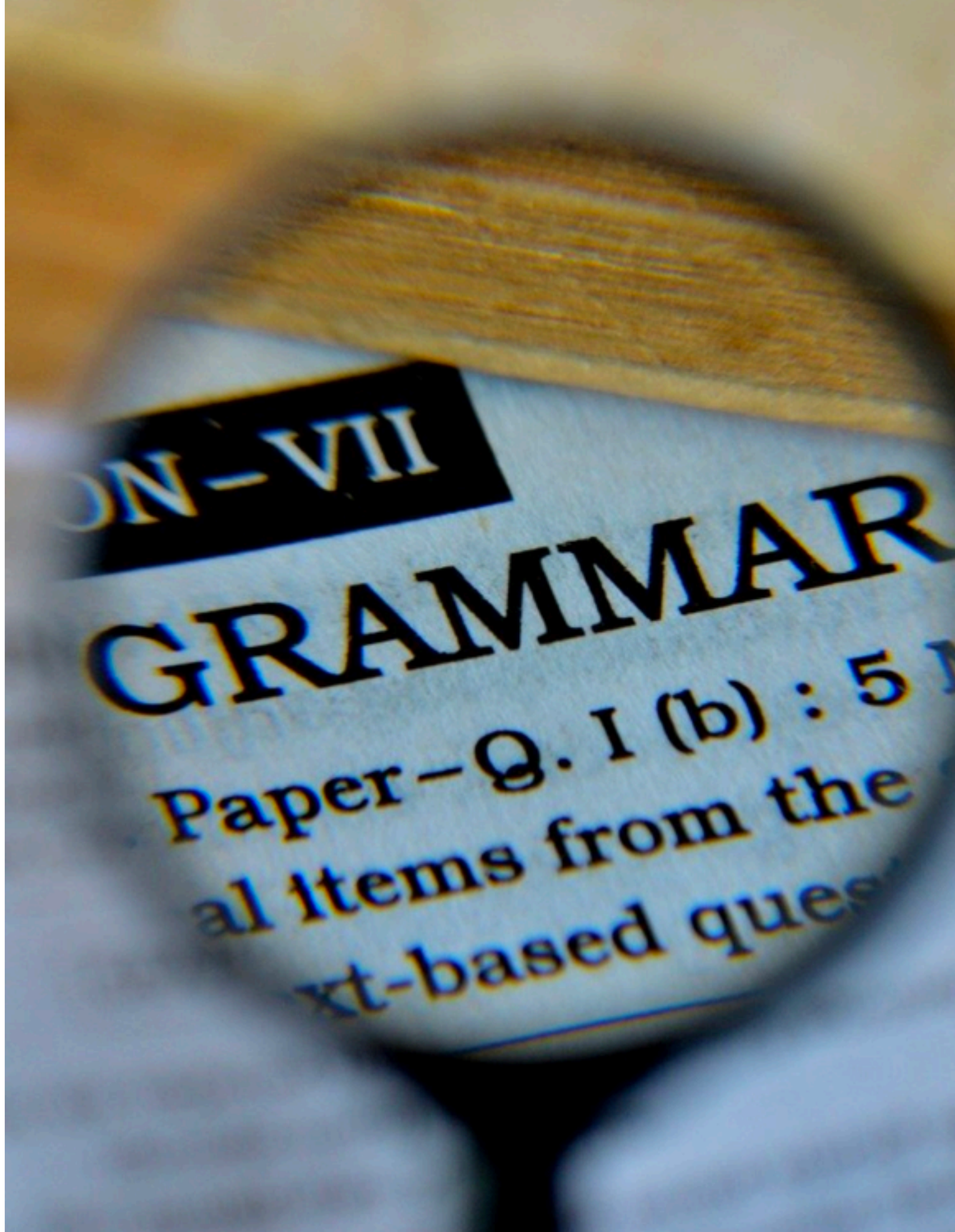
There are many ways to rewrite the statement more clearly. Here is one: "Lightly honk your horn if a pedestrian blocks your path. If he continues to block your path, honk more vigorously."

Abusing rules of grammar

Bad spelling is a source of communication problems, though not an especially subtle one. The great individualist from Tennessee, Davy Crockett (1786-1836), was a frontiersman who had little respect for book learning; he spelled words any way he wanted and said “The rules of English spelling are contrary to nature."

He had a point, because English spelling isn't designed for easy learning—ask anyone from another country. But none of us can change that situation. Crockett couldn't, and you can't. So, if we are to communicate effectively, we've all got to spell words the way most everybody else does.

One of the first rules of good communication is to use grammar and semantics correctly. For example, the sentence "She is a person lovely" is bad grammatically, but the semantics is OK. The sentence "She is a negative square root" uses good grammar but bad semantics, although people will know what you mean if you say the sentence is grammatically weird. The primary goal as a communicator is to communicate your meaning clearly. Don’t make your audience do extra work to figure out what you mean when they encounter bad grammar or bad semantics.



A common error is to make phrases modify unintended parts of a sentence. The reader can get the wrong idea.

Here is an example from a newspaper article:

Coach Pucci offered his resignation effective at the end of the current school year, on Christmas.

This report puzzles the reader because the school year ends in the spring, not at Christmastime. It would have been better to put the words on Christmas closer to the part of the sentence they relate to, as in the following rewrite:

Coach Pucci offered his resignation on Christmas, to be effective at the end of the current school year.

The original sentence was odd—odd enough that the reader had to stop and do extra work to figure out what you meant. In doing this, readers apply a special principle of logical reasoning:

The reader applies the principle of charity by taking the writer to mean something sensible when the writer could easily be interpreted as unintentionally having said something silly or obviously false.

According to the principle of charity, you should give the benefit of the doubt to writers or speakers whose odd statements you are trying to understand; if the statements appear to be silly, then look for a less silly, but still likely, interpretation. In a conversation, when a new speaker makes a comment, we listeners apply the principle of charity by assuming that what they said is intended to be a relevant contribution to the conversation. In fact, it's a sign of mental illness if a person too often makes a comment that is irrelevant to the conversation. Mentally healthy people try to make contributions that can be easily understood to be relevant.

The lesson the principle of charity offers to speakers rather than listeners is that we should clearly say what we mean so that our listeners or readers won't be put through unnecessary mental gymnastics trying to figure out what we really intended to say.

Communication is often hampered when people are sloppy and don't realize what they are saying. Here are some humorous but authentic examples. Imagine being a teacher at an elementary school and receiving these two excuses from Anne's parents: (From The Sacramento Bee newspaper, February 24,1988.)

- Anne didn't come to school. She was in bed under the doctor and could not get up.
- Please excuse Anne. She was sick and I had her shot.

With a little charity and empathy, you can figure out what the parent meant.

What would you think if you were a welfare department employee and you received this letter from a woman applying for financial assistance?

- I am forwarding my marriage certificate and six children. I had seven, but one died which was baptized on a half sheet of paper.

If you take her literally, you might wonder when the six kids will be arriving. Can you imagine the scene as that seventh child was baptized while it sat balanced on a half sheet of soggy paper? There are effective ways to clear up such writing problems. Here is one way:

I am mailing you my marriage certificate and the birth certificates of my six children. I had a seventh child, but he died. That child's baptismal certificate is on the enclosed half sheet of paper.

Writers need to take some care in expressing themselves or run the risk of saying something they don't mean; conversely, readers must be continually aware of not taking writers too literally.

Concept check

The person receiving the following letter at the welfare department knew not to take it too literally:

"I want money quick as I can get it. I have been in bed with the doctor for two weeks, and he doesn't do me any good."

Select one of the following choices as the better rewrite of the welfare letter:

a. "I am in urgent need of funds. For two weeks I have been in bed with the doctor, but I am still ill."

b. "I want money quick as I can get it. At my doctor's request, I have been in bed for the last two weeks, but I am still ill."

Answer (b). The point is to eliminate the sexual allusion.

Over-using euphemisms

When you replace a harsh-sounding phrase with one that means more or less the same but is gentler, you are using a euphemism. Taking a brick from King Tut's tomb during a visit to the Egyptian pyramids is really stealing, but the person who does so is likely to cover it up with the

euphemism "souvenir hunting." If the mortician mentions your "dearly departed" grandmother, that's a euphemism for your dead grandmother. The term dead is a more accurate though harsher one. If you're the type of person who tells it like it is, you will have a hard time being a successful mortician or politician.

The connotations of a term are what it suggests to the reader or hearer. Euphemisms have fewer negative connotations; they have fewer associations that are unpleasant to think about or that might offend the hearer's morality or sensitivities. Euphemisms include genteelisms such as "disrobed" for naked and "bosom" for "breasts. " A "Rocky Mountain oyster" is not an oyster at all, is it? The Bowlers' Association has resolved to use euphemisms to

make bowling a more upscale sport. They plan to get bowling out of the bowling "alleys" and into the bowling "centers." They also plan to get the balls out of the "gutters" and into the "channels."

Concept check

What is a euphemism for "armpit sweat-stopper"?

Underarm antiperspirant.

Using a euphemism in place of a negatively charged term can keep a discussion going past sensitive points that might otherwise end the discussion or escalate hostilities. However, euphemisms have their down side. They can be used for very serious deception. In the 1930s and 1940s, the German bureaucratic memos called their Nazi mass murder of the Jews by the euphemism "the final solution to the Jewish problem."

Concept check

Which terms are euphemisms for "American"?

a. Yankee

b. Capitalist pig

c. Imperialist

d. All of the above

e. None of the above

Answer (e). Answers (b) and (c) are more negative than "American." Answer (a) is not more negative than "American" in some regions of the world; New Englanders have no problem with being called "Yankee" as long as they aren't called "Yankee dogs." But even in New England "Yankee" isn’t a euphemism, just a synonym.

Sometimes we pay insufficient attention to the connotations of what we say. Suppose you were asked one of the following questions.

1. Is the government spending too much for welfare?
2. Is the government spending too much for assistance to the poor?

In a public opinion poll, it was found that twice as many Americans said "yes" to question 1 than to question 2. Can you see how connotations accounted for the difference? Pollsters, poets, and advertisers are the three groups in our society who need to be the most sensitive to connotations.

Two words that are synonymous according to a dictionary or a thesaurus can often have radically different connotations. Some public relations people make their fortunes by trading on their appreciation of these subtleties. Others achieve success by finding synonyms that disguise what is meant. The U.S.

Department of Defense purchasers have paid a lot more money for a hammer when it was called a "manually powered fastener-driving impact device." The phrase isn't a euphemism for hammer, but it does serve to obscure what is really meant. Such cover-up phrases are called doubletalk. One D.O.D. purchase order called a steel nut a "hexiform rotatable surface compression unit."

The Navy reported a 90 percent success rate for its Tomahawk missiles. By "success rate" the Navy meant the rate of successfully leaving the launch pad when the fire button was pressed. An even worse cover-up term was "collateral damage," which was what the military called damage to non-military citizens and their homes and vehicles.

Unintended innuendo

Here is a letter from Anne's parents to her elementary school teacher:

Anne was late because she was not early. . . . She is too slow to be quick.

If you were Anne's teacher, you would notice the implication that Anne is dimwitted, but you'd discount it as sloppy communication because you would apply the principle of charity and figure out what the parent probably meant instead.

An innuendo is a negative suggestion made by disguised references or veiled comments about a person. If your professor were to write a letter of recommendation to graduate school for you that said, "This student always managed to spell his (or her) name correctly," you would be upset by the innuendo. The professor is using innuendo to suggest you have few talents; being able to spell one's own name correctly is such a minor positive feature that the reader is likely to believe the writer cannot find anything more positive to say. This letter is an example of damning with faint praise.

Concept check

Identify the innuendo in the following passage.

The vice-president is a man who projects the image of being honest. The innuendo is that the vice-president is not as honest as his public relations image would suggest. If you call your opponent a "possible liar," you are insinuating something. You aren't specifically charging that he is a liar, but you aren't exactly withholding the charge either.

Imagine that you are a university professor who has been asked to write a short letter of recommendation for a student, Juanita Barrena, who wants to be admitted to social work graduate school. Here are two recommendation letters. Notice that they both state the same facts, yet one is positive, and one is negative. How could that be?

To whom it concerns:

Ms. Juanita Barrena, one of my ex-students, surprised me by asking that I write a letter of recommendation to you. Although she got an A- instead of an A, she was friendly and, if I remember correctly, organized a study group for the tests. Occasionally, she spoke in class. I recommend her.

Yours truly,

Washington Carver

To the Graduate School of Social Work:

I am delighted to have been asked by my student Juanita Barrena to write a letter of recommendation to your graduate school of social work. Juanita excelled in my European History course, capturing an A- in a difficult course. In addition to her good grade, she stands out in my mind as being quite exceptional. Not only did her insightful comments capture the attention of the entire class while demonstrating an excellent grasp of the material, but she also showed special initiative by organizing a study group for my tests. Organizing this group demonstrated her special talent for using her social skills to achieve a specific goal that contributed to the group as a whole, an asset that will serve her well in the field of social work. Regarding her personality, I am again happy to be able to add more favorable comments; she is very friendly, an especially appropriate asset for her future career. I know of nothing about her that would reflect unfavorably upon her application. I am convinced that Juanita has demonstrated a high level of academic and social skills and shows promise of succeeding in graduate school. Again, I am happy to recommend her wholeheartedly for admission to your graduate program.

Yours truly,

Prof. Washington Carver History Department
Phone: (996) 486-9433

The emotional tone of the second letter is more animated and positive. For example, the second says "capturing an A-," which is more positive than "getting an A- instead of an A." In the second letter, Carver says he is "delighted to have been asked" to write the letter, but in the first letter he says he is "surprised" to have been asked, raising the possibility that the request was an unpleasant surprise. The second letter is longer, showing that the professor gave more attention to the student's request. The typos in the first letter are a sign of Carver's inattention. In the second letter, Carver added his phone number, demonstrating his willingness to talk further if the admissions committee desires; doing so is evidence he believes Barrena is worthy of some extra effort on his part.

Disobeying rules of discourse

A cardinal rule of good communication is to imagine yourself in the shoes of the person you are trying to communicate with. Here is another rule: If you don't like what someone has to say, don't

let him say it again. That is not a rule of good communication, just a joke. This one is, though: Obey the rules of discourse. The rules of discourse are the rules that guide communicators in normal writing and conversation. These rules are the guidelines most everyone follows and expects others to follow. We try, for example, to interpret other people's speech the way they intend it to be interpreted. We try not to be long winded or roundabout. We try to be courteous. We violate a rule of discourse when we praise faintly. If we are going to praise something, we are normally expected not to praise it at a lower level than it deserves.

Some of the rules of discourse are rules of logical reasoning, and some are not. Interpreting someone's speech the right way is a rule of logical reasoning, but being courteous is not.

It's a rule of discourse not to ask someone to do the impossible, and it's a rule not to say something unless you believe it. That is why it is so odd to say, "That is true, but I don't really believe it." It is also a rule of discourse not to give too little information, or too much information, or irrelevant information.

These rules are for normal situations. You don't follow the rules when you want to keep information secret or when you want to distract people by providing them with so much information that they won't think to ask you the questions you don't want asked.

Concept check

What rule of discourse are you violating if, when there is a knock on your door, you open it smiling and say, "You're not unwelcome to come in"?

Don't be roundabout.

Being sarcastic is a technique that intentionally violates the rules or that conveys a pessimistic opinion. Saying in a sarcastic tone "Yes, I believe you" conveys just the opposite. It is an interesting way to say, "No, I do not believe you." Isn't it fascinating to analyze the rules of language?

Not sticking to the issue & not treating it fairly

Let's consider the notions of accepting the burden of proof, identifying the issue in a disagreement, sticking to the issue, fair play in argumentation, and creating a counterargument.

Not accepting the burden of proof

If a neighbor says, "Jeff slit the tires on my son Jeremy's bike," he is expressing his opinion. An opinion is a belief. But is his opinion also a fact? Maybe. He can show it is a fact if he can prove it to be true. If he expects to convince other people of his opinion, it is his duty to prove it. A proof of a statement is an argument for that statement that ought to be convincing; it doesn't need to be the sort of thing you would find in a math book. You prove a statement to other persons if you give them reasons that ought to convince them, even if those reasons don't actually convince

them. The important point is that people don’t know something if they are not justified in believing it.

Sometimes, it isn't obvious who has the burden of proof. If two people each make a statement disagreeing with the other, who has the heavier burden of proof? You can't tell by asking, "Who spoke first?" Usually the burden is on the shoulders of the person who makes the strangest statement. A statement is considered strange if it would be likely not to be accepted by the majority of experts in the area under discussion. People who make controversial statements have the greater burden of proving their statements.

The claim that an alleged mass murderer is innocent may be unacceptable to people in a community because the community members have been convinced of his guilt by media coverage. Nevertheless, the burden of proof does not rest with those who make the controversial claim of his innocence; it still rests with those who assert his guilt. The legal experts would say that the controversial claim is the claim that he is guilty before the trial has concluded.

There are other problems in determining where the burden lies. In the late twentieth century, an English researcher discovered a poem inserted between two pages of an obscure book in the Bodleian Library of Oxford University in England. The poem was handwritten by a seventeenth-century scribe who attributed it to William Shakespeare. Surprisingly, however, this poem was not part of the currently known works of Shakespeare. Was it really by Shakespeare? That's the question. Examination of the paper and ink verified that the poem was indeed copied in the seventeenth century. Shakespeare himself died in the early seventeenth century. The poem is clearly written in the style of a Shakespearean poem, although it is not an especially good poem. The researcher is convinced the poem is Shakespeare's. At this point, does the researcher have

the burden of providing more proof, or does the skeptic have the burden of proving the poem is not Shakespeare's?

The burden of proof has now shifted to the skeptic, not on the person who said it was written by Shakespeare. Unfortunately, it takes expertise to know this. Because of how the poem was discovered, when it was copied, and the style it is written in, experts on English poetry generally concede that the case has been made in favor of Shakespeare, as author, and the burden is on somebody to show he was not the author. Many skeptical researchers have analyzed the poem, looking at such things as the number of words that aren't in any of Shakespeare's other works, but they have failed to prove their case.

Concept check

Jeremy says, "My goldfish are dumb, dumb, dumb. They don't know one-tenth as much about the world as I do." David responds, "You can't say that. Maybe we just can't communicate

with your fish." Who has the greater burden of proof in this dispute?

Jeremy doesn't. He is simply making a claim that agrees with common sense. Since David is challenging common sense, he has the greater burden of proving his claim.

Diverting attention from the issue

Besides shouldering one's share of the burden of proof, an equally important duty for a logical reasoner is to stick to the issue during an argument. The issue in a piece of reasoning is what the reasoning is specifically about; it's the central question under discussion as opposed to the more general topic or subject. In the example of the neighbor accusing Jeff of slitting the bicycle's tires, suppose another neighbor says, "Quit picking on Jeff. You've hassled him before, and now you are doing it again. You never liked the fact that your son got beat up when he started that fight with Jeff." Now the second neighbor is raising a different issue. The issue was whether Jeff did it, but the new neighbor is trying to divert attention from this to a new issue, whether the accuser of Jeff has a hidden agenda. Even if you settle that second issue and find that the neighbor does have a hidden agenda, that does not settle the issue of whether Jeff did slight the bicycle tires.

A good reasoner follows the principles of sticking to the issue and treating it fairly. The goal is to pursue the truth about the issue, not to sidetrack, confuse, or con one's opponent. Logical reasoners argue in good faith. The purpose is not to win, but to discover the truth. However, political debaters usually don't pursue such a high ideal. Similarly, lawyers fight for their client; they don't try to convince the jury their client is guilty, even when they believe that the client is indeed guilty.

It is possible to learn a lot about good reasoning by examining the major errors in faulty reasoning. Errors in reasoning are called fallacies, and this chapter explores some of the major fallacies having to do with getting off the issue. These are often called the fallacies of irrelevance, because when you stray off the issue you make irrelevant remarks.

When trying to spot the issue in an argument, one technique you can use is to search for some conclusion that is being defended. Then try to see if the reasoner is promoting the conclusion as their way of settling a controversy. That controversy will be the issue. Figuratively, the technique works like this. Imagine that you are walking along the top of a fence, and someone is giving you reasons to come down on one side. The issue in the argument is whether to come down on one side or on the other. The arguer is not arguing in good faith if he is pulling you off the fence onto his side by some means other than giving good reasons.

Concept check

Identify the issue in the following discussion.

Jennifer: You are worrying too much. You should spend less time thinking about the consequences for police officers and more about the consequences for the mayor's office. If the mayor or vice mayor were injured, there would be an outpouring of grief throughout the city.

James: Police put their lives on the line for us every day. Each police officer's life is valuable, as valuable as the life of the mayor. Our police deserve our respect.

Jennifer: You are thinking of TV shows. Being a farmer is a lot more dangerous than being a cop, but that's a side issue. Look, if some of the police guarding the mayor and her staff get shot during the event we are planning, well, that's life. They know the risk. That's why we politicians pay them so much money.

James: That sounds pretty callous to me. I don't think you should write off police lives the way you write off the latest 2 percent budget cut.

Jennifer: Wake up to the realities. I'm talking political power, and you're just talking sentiment and morality.

The issue is:

a. that police lives are valuable.

b. whether political power is more important than morality.

c. that Jennifer is being callous about police lives and James is being sensitive and showing respect for them.

d. whether the lives of the police are as valuable as those of the mayor and vice mayor.

e. that if the mayor or vice mayor were injured, there would be an outpouring of grief all through the city.

Answer (d). (a) is not the answer because it makes a statement on James's side of the issue, (b) is not the answer because, although it does give an approximate statement of the topic, the more specific issue is better stated by answer (d). Answer (c) states James's position on the issue, but it does not state the issue itself, (e) states something that James and Jennifer might agree to, but it is not the specific subject of their controversy.

The normal goal of an arguer is to provide convincing reasons for a conclusion that takes a position on the issue at hand. Arguments that do not achieve that goal are said to be bad, illogical, or fallacious. If the issue is whether a particular Toyota will start in the morning, the following argument doesn't speak to the issue:

The Toyota is owned by Barack, who is a citizen of the state of Hawaii, and aren't Hawaiians Americans? So, the car is owned by an American citizen.

The argument is fallacious, given the content. Yet the same argument would be on target in another context where the issue is the nationality of the car's owner, but it's not relevant to the issue of whether the car will start. Intentionally diverting someone's attention from one issue to another is called the **red herring fallacy** and the irrelevant issue is called the red herring. The name comes from a prison break in which the prisoners are being chased by prison guards using dogs. The prisoner throws a red herring fish in some direction to divert the dogs in that direction. (Dogs presumably will be attracted more by the smell of the herring than the smell of the prisoners.) The bottom line here is that knowing the issue is key to deciding whether an argument is any good.

One extremely common technique of providing a red herring works like in this example. It is the 1950s and you are manufacturing cigarettes. Your opponent is complaining that statistics show cigarette smoking causes several kinds of health problems. To throw the discussion off track you comment, "Can you be certain? Surely the link between cigarettes and health problems isn't definitive, is it?" Raising doubt is what you are selling now, and it is the best means of competing with the body of facts. The current debate around climate change is a similar scenario.

Scientists are some of our society's best examples of critical thinkers, and it is their professional responsibility to pay careful attention to the evidence and to use the best methods of acquiring that evidence carefully. It is true that there are many examples of scientists who have not acted as critical thinkers, but pointing out these examples is not a good reason to conclude that scientists cannot be trusted any more than anyone else on scientific issues. This sub-issue of whether scientists are always totally reliable is a red herring.

Concept check

What is the specific issue about minority politics referred to in the headline of the following newspaper article? The article's author isn't taking a position on either side of the issue.

Minority politics at issue in merger

a. If Johnson County voters approve the merger of city and county governments into one mega-government in the November election, how minorities exercise political power could be dramatically transformed.

b. At least two current elected officials—both minorities—contend that the transformation means that minority communities will lose what little influence they now have.

c. Those minorities who helped write the proposal insist, however, that the local community councils formed under the merger will offer an unprecedented opportunity for minorities to hold office and to sway the debates on issues vital to their communities.

d. There will be no loss of adequate representation, they contend.

Answer (d). The issue is whether the merger of the city and county governments of Johnson County will result in loss of adequate political representation for minorities. Answer (e) is not as good because it doesn't say what minorities might lose. Answers (a) and (b) are too imprecise, though they say nothing false. Answer (c) is the worst answer because it comes down on one side of the real issue by using the word that instead of whether.

• a. The issue is whether the result of the election for a merger in Johnson County will hurt minorities.

a. The issue is the election in Johnson County.

b. The issue is minority politics in Johnson County.

c. The issue is that the local community councils formed under the merger will offer an unprecedented opportunity for minorities to hold office and to sway the debates on issues vital to their communities.

d. The issue is whether the merger in Johnson County will weaken minority influence in government.

A discussion is easier to follow if everybody stays on the topic and doesn't stray off on tangents. The duty of the logical reasoner is to avoid getting lost and diverting the attention of others from the topic at hand. Stacey doesn't do her duty in the following conversation:

Macey: Would the Oakland A's be in first place if they were to win tomorrow's baseball game?

Stacey: What makes you think they'll ever win tomorrow's game?

Stacey has committed the fallacy of avoiding the question. Her answer does not answer the question; it avoids it. This fallacy (error) is one kind of fallacy of avoiding the issue, because answering the question is the issue here. Answering a question with a question is a common way of avoiding an issue.

Like magicians, most politicians are experts at steering our attention away from the real issue. A politician was once asked, "Do you think either the U.S. National Security Council or the Pentagon is actively involved in covert activities in this region of Central America?" The politician responded with, "I think the fact that the president has sent troops into Central America in the past is not necessarily a reason to expect that he will do so now in this region of the world. There has been a lot of pressure by the U.S. banking community to upset the economic situation, but I seriously doubt that we can expect anything as overt as the sending of U.S. troops into the region. On the other hand, neighboring countries may be upset, so there is always a threat of invasion from that direction."

The issue was whether the government was involved in covert (secret) activities in Central America. The politician avoided that issue by directing attention toward overt (public) activities. The politician cleverly and intentionally committed the fallacy of avoiding the issue. Because politicians are so likely to use this avoidance technique, reporters at press conferences are often permitted a follow-up question. A good follow-up here would be, "Thank you, sir, but I asked about the likelihood of covert operations, not overt ones. Can you speak to that issue?"

Concept check

In the following interview, does Pee-Wee Herman answer the question put to him, or does he avoid it?

Interviewer: Did you include the romance in your film as a response to people labeling you as asexual or of indeterminate gender?

Pee-Wee: It's just something I wanted to do. I never understand why people say that, though. A lot of the reviews of the show mentioned stuff like "His gender is confusing to children." To me it's clearly male on my TV show. I don't see the confusion. I don't wear wigs or cross-dress. My name is Pee-Wee. There aren't a lot of women named Pee-Wee. Probably from this interview a lot of them will write to me, [gruffly] "Mah name is Pee-Wee and ah'm a woman."

Pee-Wee's comments do answer the question that was asked; they don't sidestep it. When asked whether he included the romance in order to overcome accusations about his sexuality, he directly answered the question by saying he included it just because he wanted to and not because he wanted to overcome accusations about his sexuality. He then went on to address the accusations about his sexuality. You may believe he has a weak answer, or you may believe he didn't say enough. However, a weak answer is still an answer, so Pee-Wee did not commit the fallacy of avoiding the question.

A final note about the fallacy of avoiding the question. If somebody asks you a question, you wouldn't automatically be committing the fallacy by refusing to answer the question. Only if you should answer but don't do you commit the fallacy.

An arguer might suggest several issues while addressing another issue. The distinction is important in this conversation:

Sanderson: These Korean video cassettes are a lot cheaper than the ones Sony makes.

Tamanaka: Yeah, it's a shame. It's time Congress quit contemplating its navel and created tariffs against Korean electronic imports.

Sanderson: I don't see any reason for tariffs. Tariffs just restrict free trade.

Tamanaka: There should be more U.S. tariffs against Korean electronic imports because Koreans are getting unfair assistance from their government to subsidize their electronics manufacturing and because Koreans already have too much influence in the American economy.

The issue in the conversation is whether there should be more tariffs against Korean electronic imports. The argument in Tamanaka's last remarks addresses this issue. However, his remarks also suggest other issues, such as: Is there anything wrong with having Korean influence on the American economy? If it being right or wrong depends on how much Korean influence, then how much is too much? Are Korean electronics manufacturers really getting a government subsidy? If so, is that unfair? These side issues get suggested, but they don't get addressed in Tamanaka's argument. An argument will normally address one issue at a time. If you create an argument, your reasoning will be easier to follow if you take the issues one at a time and not try to handle everything at once.

Giving too many details

Communicators sometimes communicate ineffectively by offering too many details for the purpose at hand. The common metaphor here is that their audience will fail to see the forest because they’re being told to look at too many individual trees.

Re-defining the issue

It is one thing to argue about an issue but another to agree on what the issue is. For example, on the twenty-fifth anniversary of the first U.S. government report on smoking, the Surgeon General said that cigarette smoking was responsible for more than one out of every six deaths in the United States. Noting that nearly 30 percent of American adults still smoke, despite the Government's warnings, the Surgeon General said that many publications that carry cigarette advertisements also refuse to run articles on the danger of smoking. In addition, the Surgeon General defended taxes on cigarettes. The issue, said the Surgeon General, is health. Not so, said the cigarette companies; the issue is individual freedom—whether our society should have more or less government interference in private enterprise. The issue is whether the government should be involved, by taxation and by requiring warnings on cigarette packs, in an unconstitutional attempt at censorship. It's time for more people, including the Surgeon General, to wake up to the fact that "smokers and the tobacco industry are productive forces in the economy," said the director of media relations for the Tobacco Institute, which is the lobbying organization for the industry.

Notice that both parties in this argument are trying to redefine the issue or “frame the issue” for their own benefit. In this scenario it is probably a mistake to say that one party has identified the right issue and the other has not. All these issues should be addressed. Bringing them all out into the open gives the public a better appreciation of the situation and the ability to make more informed choices.

Progress can also be made in some disagreements by focusing on the issue in other ways: by defining the issue more precisely, by narrowing the issue, and by noticing when one issue must be settled before another can be fully addressed. For an example of the dependence of issues, consider the lobbyist for San Francisco who is deciding whether the city should take a position to support or oppose a proposed state law to redefine the formula for distributing state monies to county hospitals. The lobbyist will probably not be able to decide whether to recommend support for or opposition to the bill until another issue is settled—whether the bill will give more or less money to San Francisco County Hospital. Local governments usually don't take a stand for or against a bill based solely on fiscal impact, but they always keep fiscal impact in mind.

Here is an example of progress by narrowing the issue. Suppose a student in a government or political science class is asked to write a four-page essay on a topic of their own choosing. Choosing the issue of whether capitalism is better than communism would be inadvisable because this issue is so large and the essay is supposed to be so short. That big issue would not be manageable. The essay would have to discuss every

country in the world and its economics, political freedom, military, lifestyles, and so forth. The essay would be improved if the student narrowed the issue to, let us say, whether race relations were better under American capitalism or under Soviet communism during World War II.

Concept check

State the issue in the following letter to the editor. Then sketch the argument for the other side of the issue—that is, the side that the letter writer is opposed to.

Regarding "Driver Dies after Chase on 1-5," Oct. 28: The article seemed to be really confused. It stated, "The death was the fifth this year in the Sacramento area resulting from high-speed police chases." In fact, it resulted, as most if not all of them do, from some low-life scumbag fleeing officers attempting to apprehend him—in this case for auto theft.

What would you suggest officers do, wave good-bye as soon as someone's speed exceeds the limit? Or would you prefer that police just never arrest anyone who travels at high speeds? I'm sure suspects would like that, but I'm also sure decent, law-abiding citizens wouldn't.

Covering up the reasons that favor your opponent

The reasoner who is trying to be fair and seek the truth not only stays on the issue but also avoids misrepresenting the views of the opposition. In addition, the logical reasoner doesn't hide the opponent's reasons under the carpet. The reasoner who does so is guilty of a cover-up. Take this passage, for instance:

When you are considering which kind of apartment to live in, you should prefer wooden buildings to brick buildings. Brick buildings are more dangerous during earthquakes because wood will bend during the quake, but brick will crack and crash down on you. Also, and even more important, brick has been discovered to be radioactive. If you put a sensitive Geiger Counter up to a brick, any brick, it will click, and it won't with wood. We already have enough sources of radiation in our lives without living surrounded by hundreds of brick sources. So, next time you are apartment hunting, remember to look for wood.

Did you spot the cover-up? It sounds well-reasoned, but it is covering up the bad aspects of wood while scaring you away from bricks. Although it is true that earthquakes are more of a danger for brick apartments than for wood apartments, earthquakes are rare, while fire is a much greater danger everywhere, and bricks don't burn. Second, although it is true that bricks are radioactive, the radioactivity is so trivial that it is

not worth bothering about. The danger of wood fires is far more serious. The moral is:

Critical thinkers give opponents a fair hearing, and do not misrepresent what they say or do.

Very often we all selectively use information in order to help or hurt another person. The Reverend Jesse Jackson tells this story. One cold February afternoon, the newly inaugurated Republican President of the U.S. was on the Presidential Yacht off the coast of Maine. He had some engine trouble, but nobody on board could fix it. Being in a hurry, he got out of the boat and walked across the water to get help on shore. The newspaper reporters on shore who saw him were astonished. Off they raced to compose and call in stories to their editors. All the reporters phoned in essentially the same story, but the next day's headlines in the Republican newspapers said, "President Walks on Water." The headlines in the Democratic newspapers said, "President Cannot Swim." We all tend to process new evidence through the lens of what we already believe.

Review of major points

This chapter examined a variety of ways that writers and speakers communicate less well than we and they expect. Sometimes a writer will unwittingly make statements with low information content, will mask the true meaning with euphemism, doubletalk, or innuendo, will use sloppy sentence construction, or will violate the rules of discourse. The chapter also introduced the

principle of charity, which readers use to help interpret materials by writers who do not say what they mean nor mean what they say.

People who make statements have the burden of proving their statements. Their goals should be to stick to the issue, to pursue the truth about the issue, and not to sidetrack, confuse, or con the opponent. Progress can sometimes be made when issues are identified, or they are identified more clearly. It is important to distinguish between the issue that is addressed and the side issues that are suggested. Some disagreements can be settled by drawing attention to the issue, by more precisely defining the issue, by narrowing the issue, and by noticing when one issue must be settled before another one can be fully addressed.

In this chapter we briefly distinguished fact from opinion, introduced the notions of taking a position on an issue, shifting the burden of proof, making a fallacy, and offering a counterargument.

Assignment 4a

Complete the following three (3) exercises. Then, submit your answers to the three (3) to Canvas under Assignment 4a.

1. Find a newspaper headline that distorts the facts for attention and rewrite it to be more accurate. Explain why.
2. Match the harsh words in the first column (on the left) with their euphemisms in the second column (on the right):

retreat	adjust downward
mad	neutralize

Glossary

Burden of proof: The duty to prove some statement you've advocated. The burden is usually on the shoulders of the person who wants others to accept his or her statement. When two people make statements that disagree, the burden falls on the shoulders of the person making the more controversial statement.

Counterargument: An argument that attempts to undermine another argument.

Euphemism: A gentler word or phrase used to replace a harsh-sounding one.

Fallacies: Reasoning errors.

Fallacy of avoiding the issue: Failing to address the issue at hand by going off on tangents. However, the fallacy isn't committed by a reasoner who says that some other issue must first be settled before the original issue can be adequately addressed.

Fallacy of avoiding the question: A type of fallacy of avoiding the issue that occurs when the issue is how to answer some question. The fallacy would be committed if someone's answer were to avoid the question rather than answer it.

Innuendo: A negative suggestion made by disguised references or veiled comments about a person.

Issue: The specific topic, subject, or central question under discussion, as opposed to the general topic, subject or question.

Knowledge truths: you are justified in believing.

Principle of charity: Giving the benefit of the doubt to writers and speakers who have said something silly or obviously false, and not taking them too literally.

Position on an issue: Your belief about how an issue should be settled.

Proof: An argument that ought to be convincing. It doesn't need to be the sort of thing you would find in a math book. You prove a statement to other persons if you give them reasons that ought to convince them, even if those reasons don't actually convince them.

Red herring fallacy: The error of intentionally distracting someone with a side issue or irrelevant issue.

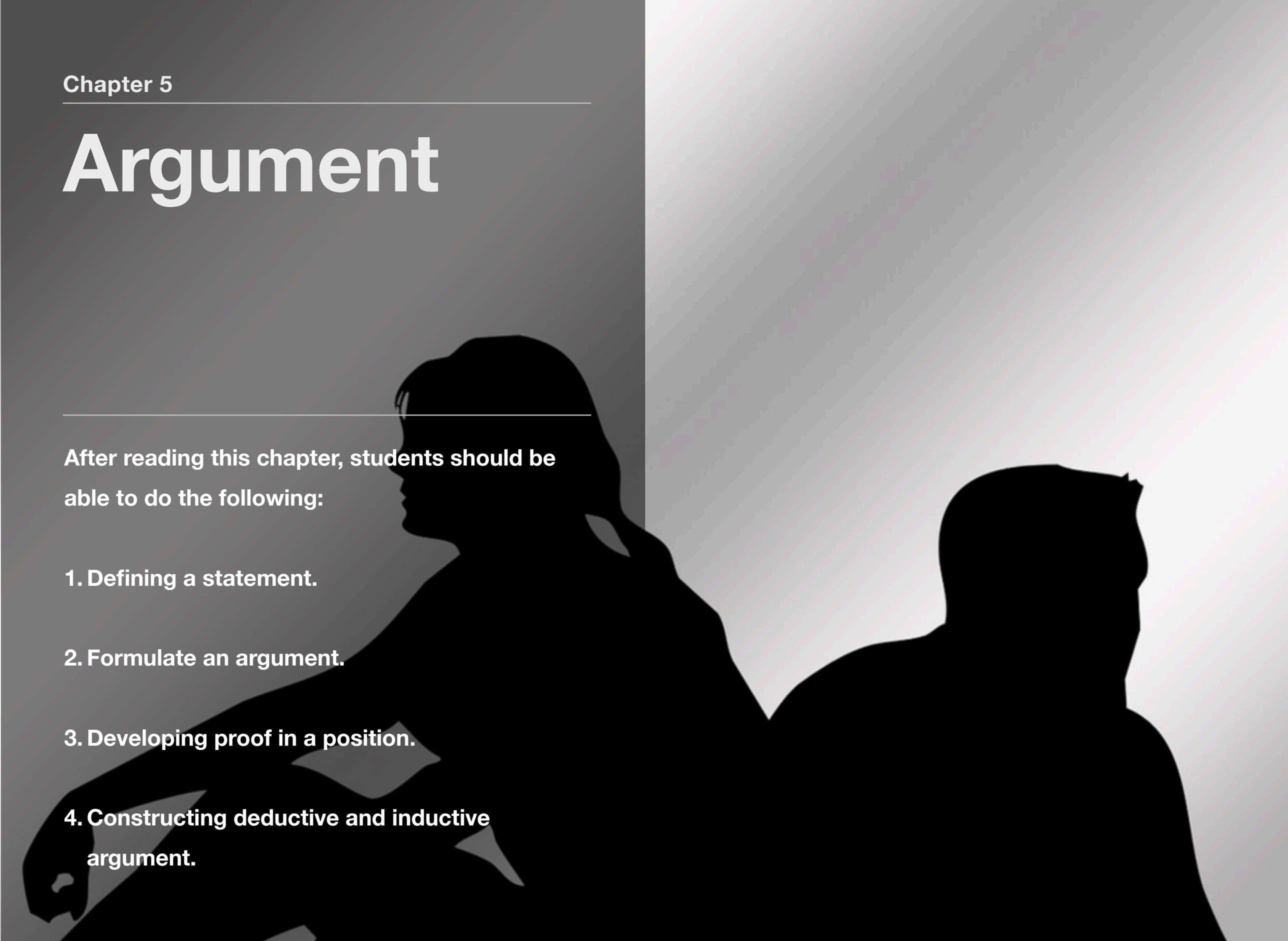
Shifting the burden of proof: By making a reasonable case for your position on an issue, you thereby shift the responsibility of proof to the shoulders of your opponent who disagrees with your position.

FEEDBACK

Tap on the thumbnail above to leave feedback for your professor.

Chapter 5

Argument



After reading this chapter, students should be able to do the following:

1. **Defining a statement.**

2. **Formulate an argument.**

3. **Developing proof in a position.**

4. **Constructing deductive and inductive argument.**

What is a statement?

Statements are what is said. More accurate, statements are things that are said that are either true or false. They are also called claims. Here is one: "The homicide rate in England was fifty times higher in the fourteenth century than it is today." Here is another: “Neptune has the fastest winds in the solar system.” Both of these statements happen to be true. A statement that is especially important to us might be called a proposition, assertion, judgment, hypothesis, principle, thesis, or, in some situations, a law. Statements have to be capable of being true or false even if we don't know which. So, if you say, “Is it midnight?” then you've not made a statement. Suggestions, commands, and proposals aren’t statements either. The suggestion “We should get a new refrigerator,” and the command, “Stand back!” and the proposal, “Let’s quit studying,” are not statements. It would be very odd to call any of them “true” or “false.” The following are statements: “She suggested we should get a new refrigerator,” and “He said, 'Stand back!'”

Although there is a difference between a declarative sentence used to make a statement and the statement made with that declarative sentence, this book will often not honor that fine distinction and will speak of declarative sentences themselves as being statements.

Concept check

Is the following sentence a statement?

The biggest question your pre-historic ancestors faced was, "Is that thing behind the bushes my next meal, or am I its next meal?"

Answer: The question itself is not a statement, but the larger sentence containing the question is. The larger sentence is used to make a statement about the question.

You can’t spot the claims if you don’t speak the language. In the passage below from a famous Valley girl, try to decide whether the phrase in italics is (used to make) a claim. You won't be able to figure this out if you don’t understand a little Valley-girl-ese.

So, I loan Whitney my copy of GQ, right, and she drops strawberry yogurt right on the cover, and like I could totally be so edged, but I tried to be cool.

To tell whether it's expressing a claim, you don't have to be able to figure out whether it's true, but only whether it could be—whether it's the sort of thing that might be true or might be false. The passage does make the claim. Its claim is that the speaker could be upset by Whitney's dropping strawberry yogurt on her copy of *GQ Magazine*.

In spotting statements or claims, you need to pay close attention to language. One of the following is a claim and the other is not. Which is which?

I promised to give you $5. I promise to give you $5. 26

What is an argument?

The word argument has more than one meaning. In this book we will not use the word in the sense of being unpleasantly argumentative. Instead, it will mean at least one conclusion supported by one or more reasons, all of which are statements.

It takes only one person to have our kind of argument, not two. Saying that two people are "in an argument" means that there are two arguments, not one, in our sense of “argument.” Each of the two persons has his or her own argument. In short, our word argument is a technical term with a more precise meaning than it has in ordinary conversation.

Statements that serve as reasons in an argument are also called premises. Nothing to do with the yard sign that says, “Keep off the premises.” Any argument must have one or more premises. And it will have one or more "inference steps" taking you from the premises to the conclusion. The simplest arguments have just one step. Here is an example of a very simple argument that takes you to the conclusion in just one inference step from two premises:

If it's raining, we should take the umbrella.

It is raining.

So, we should take the umbrella.

Concept check

Match the numbers with the letters.

a. Only a claim, with no reasons given to back it up.

b. An argument using bad reasons.

c. An argument using good reasons (assuming that the arguer is being truthful).

d. None of the above.

1. What time does the movie start?

2. This card can save you a lot of money.

3. Vote Republican in the next election because doing so will solve almost all the world's problems.

4. John Adams was the second president of the United States. My history teacher said so, and I looked it up on Wikipedia with my phone.

(d 1, a 2, b 3, c 4.) Passage (1) is a question, not a claim. A claim is an assertion that something is true, and it is usually made with a declarative sentence.

To find out whether an argument is present, you need to use your detective skills. Ask yourself whether the speaker gave any reason for saying what was said. If you get a satisfactory answer to your own question, then you probably have detected an argument, and you've uncovered its conclusion and premises. In detecting an argument, your main goal is to locate the conclusion, then the reasons given for that conclusion, while mentally deleting all the other sentences and phrases that are not part of the argument.

For any conclusion, the premises used directly to support it are called its basic premises. In a more complicated argument, there may be reasons for the reasons, and so on. But these reasons for the reasons are not part of the core. The core of the argument is the conclusion plus its basic premises.

Every argument has to start somewhere, so it is not a good criticism of an argument to complain that all its premises have not been argued for.

Concept check

Select the one best choice for the conclusion of Sanderson's argument in the following disagreement.

Sanderson: Do you realize just what sort of news you get on a half-hour American TV news program?

Harris: Yes, newsy news. What do you mean?

Sanderson: Brief news, that's what.

Harris: Brief news like boxer shorts?

Sanderson: Ha! Look at a time breakdown of the average half-hour news program broadcast on American TV. It is nine minutes of news!

Harris: What's the rest?

Sanderson: Eleven minutes of commercials, six of sports, and four of weather. You can't do much in nine minutes. I say nine is not enough if you are going to call it the "news." What do you think?

Harris: It is enough for me. News can be boring. Besides, if the American public didn't like it, they wouldn't watch it.

Sanderson: Now that's an interesting but ridiculous comment. But I've got to go now; we can talk again later.

Sanderson's conclusion is

a. If the American public didn't like brief TV news, they wouldn't watch it.

b. Do you realize just what sort of news you get in a half-hour American TV news program?

c. That's an interesting but ridiculous comment [about the American public's taste].

d. There is not enough news on a thirty-minute TV news program in America.

e. An average half-hour American TV news program is eleven minutes of commercials, nine of news, six of sports, and four of weather.

After choosing Sanderson's conclusion from the above list, comment on the quality of his argument for that conclusion.

Answer (d) is correct. Sanderson's conclusion is that more time should be spent on the news during a thirty-minute TV news program. Answer (e) is wrong because it is simply a fact that Sanderson uses in his argument. It is something he wants the reader to believe, but it is not something he is arguing for. Regarding the quality of Sanderson's argument, saying only "I don't like his argument" is insufficient; it doesn't go deep enough. This kind of answer is just opinion. To go deeper, the opinion should be backed up by reasons. The weakest part of Sanderson's argument is that he isn't giving us good enough reasons to believe his conclusion. He makes the relevant comment that news occupies only nine minutes out of thirty. He then suggests that you cannot "do much in nine minutes," and he evidently thinks this comment is a reason to believe his conclusion, but by itself it is weak. He probably believes it is obvious that nine is brief, but he ought to argue for this. It's not obvious to his opponent, Harris. Harris could respond by saying, "You can do nine minutes' worth of news in nine minutes. What do you want instead, ten minutes?" Sanderson should have mentioned that too much important news is left out in nine minutes and then tried to back up this remark.

What is the issue?

We argue in order to settle issues. Issues arise when there is uncertainty about whether to accept or reject a claim, or about what to do or not do. For example, someone argues for the claim that you ought to quit eating strawberry yogurt because it causes cancer, and you wonder whether it really does cause cancer. You are wondering about the following issue:

whether eating strawberry yogurt causes cancer.

It's common to express an issue by using the word "whether" to indicate the uncertainty involved. You don’t want to express the issue by taking just one side of the issue.

When two people are "in an argument," they are divided on the issue. The metaphor is that they are on opposite sides of the fence.

A second, common way of expressing an issue is to present it as

a question:

Will eating strawberry yogurt cause cancer?

The question also brings out the uncertainty and doesn't take a side. It would be a mistake to say the issue is that eating strawberry yogurt causes cancer. That way of present the issue destroys the uncertainty and presents only one side of the issue.

The issue is not the same as the topic. The topic is food and health. Topics are more general than issues; issues are more specific than topics. When you find an argument, the issue is whether the argument's conclusion is correct.

Concept check

The following sentence shows that the writer is confused about the difference between an issue and a claim:

The issue of whether an oppressive government is better than no government is a claim open to refutation.

What is the best way to rewrite the sentence in order to remove the confusion?

a. The claim of whether an oppressive government is better than no government is an issue open to refutation.

b. The issue of whether an oppressive government is better than no government is a refuted claim.

c. The claim that an oppressive government is better than no government is controversial and open to refutation.

d. The issue of whether an oppressive government is better than no government is a position open to refutation.

The topic is oppressive governments. The issue is whether an oppressive government is better than no government. One position on that issue is the claim that an oppressive government actually is better than no government. This claim is controversial. Thus you should select c as the answer to the above question. That answer is the only one that isn't using one of the following terms incorrectly: issue, position, claim.

Our example above used the slippery term “refutation.” If you claim what somebody just said is false, then you aren't refuting their claim; you are simply disagreeing with it. In order to refute it, you'd have to make a successful case that what they said is false. You can’t refute someone’s claim merely by contradicting it.

Concept check

What is the issue in this argument?

You politicos keep arguing that institutions can't be changed when, in fact, they change all the time. Haven't they ever heard of the institution of slavery? It’s gone from this continent, isn’t it?

a. Can institutions be changed?

b. Whether the institution of slavery changed.

c. That institutions can be changed.

d. That institutions can't be changed.

Answer (a). A yes answer and a no answer would be giving opposite answers to this issue.

What is a proof?

People often argue in order to prove something. But that word “proof” is a tricky word. There are different standards of proof in different situations. You have to meet a higher standard if you are proving a new theorem in mathematics than if you are proving to your neighbor that you saw the same film he did last week. Basically, though, a proof is a convincing argument, an argument that should convince your audience, not simply an argument that does convince them.

Concept check

Suppose you cannot locate that favorite blue shirt you want to wear. You’ve looked in the closet where you usually keep your shirts. You remember washing it at the Laundromat in your apartment building last week. Maybe you hung it back in the closet after that, or maybe you didn’t. You can’t remember. You don’t remember any other time it has been out of the apartment recently. Could you be having a memory problem? You do remember your worst case of bad memory; last year you were sure your apartment key was on the kitchen table, but then you found it an hour later on a shelf in your refrigerator. But after thinking about this you decide that is very unlikely the shirt loss is because of memory failure. You decide to do a more careful

search. You look through each item of clothing in your closet, on the closet floor, and in the drawers in your dresser where you place other clothes. You look a few more places in your apartment. Then you remember that occasionally you hang clothes in the closet on top of other clothes hanging there because you don't have enough coat hangers. So, you search your closet one more time looking under everything hanging there. Still no shirt. So you conclude, "This proves the shirt was stolen." You start thinking about your three friends who have been in your apartment since the last time you saw that blue shirt. David was there when you went out for an hour to get party supplies. The shirt would fit him. That proves the shirt was stolen.

A logical reasoner hearing this story might say, "That's not really a proof," and this judgment would be correct. What else would it take for you to have a real proof the shirt was stolen by David?

It's more likely you lost your shirt in the Laundromat than to a thief in your apartment. You can't have a proof without being sure that the shirt wasn't lost at the Laundromat or on your travels back from there. If you could rule this out, then you'd have a stronger case that it was stolen. Even so, that evidence about the Laundromat is not going to be available to you. Also, for a decent proof you'd need some more direct evidence of a thief, such as a friend telling you he saw David wearing it yesterday, or a neighbor telling you she noticed someone leaving your apartment yesterday carrying a blue shirt. Most probably you'll never get a proof your shirt was stolen even if it was, because having a proof requires having a totally convincing case.

Indicators

Spotting an argument and evaluating whether the argument is any good are two distinct abilities. Usually you use them both at the same time. Before you can evaluate an argument, you have to identify it, so let's begin with this skill. When you are reading a passage, ask yourself, "Is the writer intending to prove something? Am I being given any reasons intended to convince me to believe something or do something?" Detecting arguments can be difficult sometimes, but there are verbal clues to look for. The start of a conclusion is often indicated by the word therefore, so, or thus. In addition to these conclusion indicators, the terms because and suppose-that signal that a reason is coming. Since the technical term for reasons is premises, the terms because and suppose-that are called premise indicators. The logical reasoner is always on the alert for premise indicators and conclusion indicators.

Often, however, arguers are not so helpful, and we readers and listeners have to recognize an argument without the help of any indicator terms. Even when we have indicator terms, we can't rely on them 100%. Those same terms might have other uses. For example, do you see why the conclusion indicator "so" is not working as a conclusion indicator in the following?

Air contains molecules. Dirt does, too. So does water.

There is no argument here, just a sequence of claims. The word “so” is indicating another term in the sequence. It is working as the word “and” usually works, not as a conclusion indicator of an argument.

Premise indicators are verbal clues that you are being given a reason or premise. Then ask yourself, "What are the reasons for the conclusion?" or "How is this point being supported?" Your answers supply the premises. There are verbal clues for finding premises, too. The words "since" and "because" are the most common premise indicator terms, but there are many others.

Concept check

Does this sentence by Albert Einstein contain a conclusion indicator word that is actually working to indicate a conclusion?

The unleashed power of the atom has changed everything save our modes of thinking, and we thus drift toward unparalleled catastrophe.

a. yes b. no

Answer (a). Einstein is giving an argument, and he is using the word “thus” to indicate his conclusion that the human race is drifting toward unparalleled nuclear catastrophe. (If you are reading this sentence, then the chances are that we haven't arrived there yet, even if we are drifting there.)

Concept check

Do all strong arguments have two or more premises plus at least one conclusion?

a. yes b. no

Answer (b). Some good arguments have only one premise. Here is an example: "Viruses are the simplest life forms, so that virus you are looking at with your microscope is simpler than other life forms."

When looking for an argument within a passage, you need to be alert that sometimes the conclusion is stated before the premises, sometimes after the premises, and sometimes embedded in the middle of the premises. Often, sentences are included that are neither premises nor conclusions; they are there for elaboration or for some other purpose, such as to entertain, to describe, to explain, to discount a possible complaint, and so forth.

Here is an example of an argument from authority that contains both kinds of indicator phrases:

Premise indicators

since

because

for the reason that

assuming

suppose

as indicated by

is implied by

given that

in view of the fact that

Because the encyclopedia says that the whale shark is the biggest fish in the ocean, it follows that the whale shark really is the biggest fish on Earth.

The word Because indicates a premise, and the phrase it follows that indicates the conclusion. Indicators come before what they indicate. After identifying this argument, you might go on to evaluate it as being fairly strong, but as leaving out the crucial information about whether there are freshwater fish bigger than any fish in the ocean. Can you think of one? There aren't any.

Here are lists of some more indicator phrases:

Answer (b). Some good arguments have only one premise. Here is an example: "Viruses are the simplest life forms, so that virus you are looking at with your microscope is simpler than other life forms."

The following phrases by themselves are not indicator phrases:

if on the contrary

yet and

nevertheless also

So, do not trust these words to reliably indicate either a premise or a conclusion. Occasionally words that could be indicators do not function as indicators. Look at the word "since" in this example:

Since November when the inflationary spiral ended, state taxes have been high. State farm subsidies will therefore continue to rise.

This passage does contain an argument, and the conclusion indicator word therefore signals the conclusion, but the premise indicator word since isn't functioning to indicate a premise. It is

working as a time indicator. Because since has multiple meanings, you need to determine whether it is functioning as a premise indicator in the particular situation you are looking at. The good news is that when it is a sign that some element of an argument is present, it always indicates a premise and never a conclusion.

Notice how different these two arguments are.

She’s not here, so she’s gone to the supermarket.

She’s not here, since she’s gone to the supermarket.

The two arguments have different conclusions, don’t they? One of the arguments is much stronger than the other. Which one is that?

Concept check

Identify the indicator phrases in the following passage:

I’ve been in love with you ever since you began going out with my friend Charles. So you shouldn't say no one loves you now that he doesn't love you anymore.

So is a conclusion indicator. Since is not operating as a premise indicator.

When you are suspicious that an argument is present in a passage, the best strategy for finding it, besides simply asking the arguer whether they are arguing, is to ask yourself which statements in the passage would be reasonably convincing premises for which other statements.

Concept check

Do these passages contain arguments? If so, locate the conclusion. Identify each indicator phrase as being either a conclusion indicator or a premise indicator.

Rewriting arguments in standard form

Can you spot the conclusion and premises in this argument?

All machines have a finite working lifetime, and even though that big tree doesn’t look like a typical machine it is really just a biological machine; therefore, I believe it will stop working someday, too.

The claim “That big tree doesn’t look like a typical machine” is a discount claim. The argument’s conclusion is "That big tree will stop working someday." This conclusion does not occur explicitly in the passage. The conclusion is slightly hidden in the words that follow the indicator word therefore. We readers have to figure out that the word it is referring to "that big tree," and we must also mentally strip away the word too and the phrase I believe. The reason to remove “I believe” is that it is clear the arguing isn’t trying to convince that he or she believes the conclusion, but is trying to convince you that the conclusion is true. After

appreciating all this, we can give the following more explicit picture of the argument:

All machines have a finite working lifetime.

That big tree is really just a biological machine.

That big tree will stop working someday.

Creating this clear list with the conclusion below the line is called rewriting the argument in standard form. In place of a line, if you add the symbol ∴ before the conclusion, then that is also putting the argument into standard form. The term “standard form” means standard format.

The argument we’ve been analyzing was originally a single sentence, but this one sentence now has been shown to be composed of four statements, one being a discount claim and the other three being the core argument.

The process of transforming an argument into its standard form is like the subconscious mental process that occurs when a logical reasoner "sees the argument” in a passage. Normally, you would take the trouble to display the argument in standard form only when confronted with an especially complicated argument that you must figure out very carefully. Nobody is suggesting that from now on you sit down with the morning newspaper and rewrite all its arguments into standard form. However, trying your hand at rewriting a few simpler arguments will help build up your skill so you can succeed with more complicated arguments when the stakes are higher.

Here is a list of what you should pay attention to when rewriting an argument in standard form:

• List the premises, followed by the conclusion

• Remove extraneous sentences including discount phrases

• Remove indicator phrases

• Replace pronouns with their antecedents if possible

• Draw a line between the premises and the conclusion (or else place a ‘1∴’ before the conclusion)

• Add implicit premises

• Remove ambiguity wherever possible

• There is no need to number the premises because premise order should not make any difference.

Conditionals & the word if

The word if is not in the list of premise indicator words. You cannot rely on if to indicate a premise. Here is why. In argument A

below, the word if is followed by a premise, but in argument B it is part of the conclusion.

A. If, as we know, all men are mortal and Jeremiah is a man, not a god, then he is mortal, too.

B. If a mercury thermometer is given prolonged heating, it will break. This is because prolonged heating will cause the mercury to expand a great deal. But the thermometer will break apart whenever the mercury expands this much.

Let's examine argument B more carefully. Does it assume that a mercury thermometer is actually given prolonged heating? No. Notice also that the conclusion is not that the mercury thermometer will actually break, but only that it will break if heated. The conclusion is an if-then statement: if the thermometer is heated, then it will break. So, the if is not indicating a premise, nor is it indicating a conclusion; it is performing another function. These if-then statements are called conditional statements or conditionals. When we say, “If we cancel the picnic, I’ll be happy,” we are offering a conditional, but not offering an argument.

Worse yet, the occurrence of the word "if" in a sentence is not a reliable indicator that the sentence contains a conditional. For example, the sentence, "If you don't mind, you're standing on my foot" is not a conditional. It is a special idiom in English and is not a conditional because it cannot be rewritten equivalently as "P implies Q."

A statement can be a conditional even if the companion word then is not present. For example:

If the Campbell's Soup Company puts less salt in its soup, sales of Campbell's soup will increase.

Does it follow from this conditional claim that Campbell's Soup Company does put less salt in its soup? No. Is the speaker committed to the claim that sales of Campbell's soup will increase? No, the commitment is only to an increase on the condition that the company does something about the salt. That is why conditionals are called "conditionals."

Should you conclude from the original conditional statement that, if Campbell's sales do not increase, then the company failed to put less salt in its soup? Yes, this last conditional statement, follows with certainty from the original conditional statement. It is the contrapositive of the original statement. Conditionals have a standard form which is “If A, then B.”

Often conditionals are expressed in other ways. For example, here is a conditional that contains neither an “if” nor a “then:”

The larger a star the quicker it burns up and dies.

Rewriting it in standard form produces:

If a star is larger, then it burns up and dies quicker.

Concept check

The Governor of Alaska

Suppose you were to learn for certain that if a person is the governor of Alaska, then he or she is a U.S. citizen. If so, can you be absolutely sure that if somebody is not a U.S. citizen, then he or she is not the governor of Alaska?

Yes, you can be sure. This is the contrapositive of the original conditional.

Is the following conditional making a true statement about the real world?

If President John F. Kennedy was born in Bangladesh, then he was born in Asia.

Concept check

Answer "yes" or "no, not always" to these conditional claims:

• a. If it's an apple, then it's a fruit.

• b. If it's a fruit, then it's an apple.

• c. It's an apple if it's a fruit.

• d. It's a fruit if it's an apple.

• e. It's not a fruit if it's not an apple.

• f. It's not an apple if it's not a fruit

(a) yes (b) no (c) no (d) yes (e) no

Deductively valid & inductively strong

The primary goal in argumentation is for the conclusion to follow from its basic premises either with certainty or with high probability. Technically, this means the arguer desires the argument to be deductively valid or to be inductively strong.

The concept of deductive validity can be given alternative definitions to help you grasp the concept. Below are five different definitions of the same concept. It is common to drop the word deductive from the term deductively valid:

An argument is valid if the premises can’t all be true without the conclusion also being true.

FEEDBACK

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Chapter 6

Media

After reading this chapter, students should be able to do the following:

1. **Analyze the media.**

2. **Distinguishing bias.**

3. **Evaluate between objective and subjective positions.**

4. **Interpret the effects of the media.**

Critiquing the media

For most of us, the main source of information about the world beyond our immediate personal experience is the media. Most of the skills we need to assess this information have already been covered in earlier chapters; however, there are some special problems associated with the media that require more detailed discussion. In this chapter, we will discuss how to critique the media and consider some of the problems that arise in doing so. In particular, we will examine how the media reports factual news stories and consider how to determine whether or not these reports are unbiased. In addition, we will examine the ways in which the media can influence how we interpret the information that comes to us from all sources as well as how the media can shape many of our deeply held values.

It is important to remember that the media plays a very important role in democratic societies, namely, that of watchdog on the actions of government. This role is so important that in many countries the media is given special legal protection against direct interference by the government. Indeed, in some countries this protection is entrenched in the constitution in order to make government interference virtually impossible. In Canada, for example, section 2 of the Charter of Rights and Freedoms specifically protects "freedom of the press and other media of communications." In the U.S., the first amendment to the constitution protects freedom of speech, which the courts have interpreted as including freedom of the media. This protection is important because the threat of exposure by a legally protected media is the best way to deter governments who may be tempted to lie to the people about their competence or to cover up their misdeeds or to manipulate public opinion. As we all know, even in the face of a protected media, governments still try to deceive the public with some regularity. Of course, usually we know that these attempts have been made only because of exposure by or through the media. In addition, there is no reason to think that all such attempts have been detected and exposed by the media. However, it is clear that without a legally protected media we would be utterly helpless in the face of government manipulation.

But the very fact that the media enjoys special protection against interference carries with it the risk that the media may abuse its role. Of course, the media is subject to the laws of libel, and may be sued for publishing false information which harms someone. But apart from this restriction, which applies to all of us, the media is free to publish whatever it chooses. Of course, if we value a free media, we cannot advocate additional legal restrictions in order to ensure that the media performs its role in a responsible manner. If the media is free to report as it sees fit, then sometimes it will see fit to report irresponsibly. This is the price we have to pay for a free media. That is the nature of human freedom. However, while we have an obligation to respect and defend the freedom of the media, we also have an obligation both

as citizens and as reasoning human beings to react intelligently to the media. There are two aspects to this obligation.

First, we have an obligation to scrutinize the media in order to ensure that we understand its limitations and possible biases. If we don't do this, we risk being unknowingly misled and manipulated.

Second, we have an obligation to criticize the media when it behaves irresponsibly. The underlying reason for protecting the freedom of the media is that the health of a democracy depends crucially upon the freedom of the media to criticize the government and to advocate policies that are at variance with those of the government. When the media behaves irresponsibly it is weakening its role as a defender of democracy, and it is important to challenge the media whenever this happens.

It is important to understand the difference between criticizing the media and attacking the freedom of the media. Some people respond to criticism of the media by appealing to the principle of the freedom of the media. This response in effect claims that freedom of the media includes freedom from criticism. Such a response sadly misunderstands the nature of the freedom of the media. Freedom of the media requires only that the government not control the media. In a society where freedom of the media is respected, publishers and editors will be free to publish whatever they think is appropriate, and anyone who wants to start a newspaper or other news organization will be free to do so. In other words, freedom of the media means that control of what gets published should remain in the hands of private citizens. Criticizing the media does not challenge in any way the principle that the media should be free. Criticizing the media assumes only that editors and journalists sometimes do their job badly, and that when they do they can legitimately be criticized for their failings. People who criticize the media are almost never calling for government intervention. On the contrary, they are calling for the particular editors concerned to do their job better voluntarily.

Assignment 6a

Answer each of the following two (2) questions. Then, submit your answers to Canvas under Assignment 6a.

1. Should the media be regulated?
2. Should social media be regulated?

Determining bias

The most obvious failing of the media is biased reporting. Loaded terms are used most often and most blatantly in newspaper

headlines, but can, of course, also occur in the text of stories. Consider the following pair of headlines:

(a) PM Blames Staff for Fiasco

(b) Military Accepts Responsibility for Embarrassing PM

The first headline conveys the idea that the Prime Minister has refused to accept responsibility for something that is his or her responsibility, which strongly suggests that the Prime Minister is a moral and political coward. The second headline makes no such suggestion and is consistent with the idea that the Prime Minister has behaved responsibly. Here are some other pairs of headlines in which loaded terms convey quite different views:

(a) City Council "Cover Up" of Hospital Fraud

(b) Councillor Alleges Cover Up of Hospital Fraud

(a) Critics Disgusted by More Olympic Corruption

(b) Olympic Scandal Deepens: IOC Will Investigate New Charges

(a) More Food Aid Disappears: Canadians Conned by Corrupt Officials

(b) Food for Starving Gets Through: Delays Blamed on Rebels

(a) Butchered 7 Teenage Girls: Now Seeks Freedom

(b) Serial Killer's Parole Application Denied

In each case it is easy to see that one of the two headlines relies upon loaded terms to convey a specific value judgment. The use of quotation marks in the first example ("Cover Up") is interesting because it allows the newspaper to deny a bias by saying that the headline did not claim that there was a cover up but merely quoted someone else's allegation of a cover up. In fact, most readers will not notice the quotation marks and will take the alleged cover up as a fact and assume that the newspaper endorses the negative judgement conveyed by the phrase.

Selectivity is a more complex source of biased reporting. Selectivity occurs in three ways. First, editors have to make decisions as to what to report and what to ignore. After all, there are thousands of incidents that occur every day that we would all agree are not worth reporting. No one could blame a television network for failing to report that someone spilled a cup of coffee at breakfast. Every television news broadcast and every issue of a newspaper or news magazine reflects the editors' judgments as to what should be reported and what should not. There is no way around this; some selection has to be made by someone. Second, selectivity occurs when decisions are made as to the prominence that is given to each story. For newspapers, the question is which story will be the main front page headline, and which stories will be mentioned on page 38. For television news programs, the question is which story comes first and which stories are left to the end. Once again, these decisions are unavoidable. Only two or perhaps three stories can receive front

page coverage, and only one story can come first in a television news broadcast. Third, editors have to make decisions as to the amount of coverage to be given to each story. Should it receive detailed treatment, perhaps with additional related stories on the same topic from different reporters, or does it warrant only short cursory coverage? These three types of selectivity make it possible for the media to present biased coverage of a certain event, or certain types of events. They make it easy to play up or play down a particular story to make it seem more or less important to the audience. The story is covered and all the relevant facts may be mentioned, but the impact of the story can be significantly affected by the prominence given to it.

It is usually easy to identify and describe biased reporting that results from the use of loaded terms. Bias that arises from selectivity is a little more difficult to recognize. Often it only becomes apparent when a pattern of bias is detected. For example, a newspaper that routinely gives front page prominence to stories about welfare fraud and relegates to the back pages a government report that shows that only 6% of welfare claims are fraudulent can legitimately be suspected of attempting to create an anti-welfare sentiment. Similarly, a newspaper that always gives prominence to reports of high salaries of business executives and record profits of corporations may legitimately be suspected of attempting to foster antibusiness sentiment. In both cases, however, the bias becomes apparent only through the identification of a pattern of coverage.

Is objective reporting possible?

Identifying bias in reporting is usually a straightforward task requiring only the use of critical thinking skills. But how easy is it to remove bias from a story? At first sight, this task seems equally straightforward. After all, since a bias is something present in a story that shouldn't be there, once we identify it we should be able to remove it, thus leaving an unbiased story. Removing a bias is only difficult if we cannot identify it; once we recognize and identify a bias removing it is no more difficult than removing a pair of spectacles with tinted lenses. Many people think of bias this way because it seems to follow directly from the method we use to identify bias in a story. We identify a bias in a story, they argue, by comparing the actual story with an ''ideal” unbiased account. We compare the two and note the differences: the bias will consist of whatever is in the actual story that is not in the ideal story, and/or whatever is in the ideal story that is not in the actual story. On this view, bias is simply a failure to achieve objectivity. It is assumed that we understand what objectivity is and can recognize it when we see it. The ability to understand objectivity is thus a precondition for recognizing bias.

But this view is frequently attacked on the ground that it is unrealistic and naive to think that we know what objectivity is. There is no "ideal" objective story, the critics argue, and objective reporting is therefore impossible. All reporting is necessarily subjective and reflects the values and biases of the reporters and

editors. It may appear that some accounts are unbiased, but this is misleading, for an "unbiased" account is simply one whose biases coincide with our own. I may think my favorite newspaper is unbiased and yours is biased, but from your point of view my favorite newspaper is biased while yours is unbiased. In reality, the critics argue, we are both wrong, for objectivity is unattainable. It is not only unattainable in practice, but is also unattainable in principle. Objectivity is not some ideal goal we can strive for even though we know we can never achieve it, like a sprinter who strives to run 100 meters in under nine seconds. Objectivity is an unintelligible goal, like trying to draw a round square. This attack raises an extremely important issue which must be addressed in any assessment of the media. If the critics are correct and objective reporting is impossible, it makes no sense to criticize the media for biased reporting. All we can do is seek to identify bias so we can screen it out if we don't agree with it, or turn to a different media source for our information.

Initially, the view that unbiased objective reporting is impossible looks plausible. We all know from our own experience how difficult it is to attain objectivity. No matter how hard we might try to describe some event in totally objective terms we realize we can never produce anything other than our interpretation of it. Two people who are asked to produce detailed objective descriptions of the same event will never agree down to the last detail. They might produce closely similar accounts but this will

be merely a coincidence that arises only because they happen to share the same biases. It seems that every conceivable description of a given event can never be anything other than someone's interpretation of it. And since the media is just as inescapably biased as individuals, it makes no sense to expect anything other than some particular interpretation when we watch the news on television or read a newspaper. It therefore makes no sense to criticize the media for bias. How can we criticize anyone for doing what is unavoidable? We might as well criticize water for running downhill.

But does this conclusion really follow? Does the fact that interpretation is inescapable make nonsense of the idea that we can aim at objectivity and impartiality? Does it really rule out the possibility of criticizing media bias? It certainly would if all interpretations are equally legitimate. But is this so? Are all interpretations of an event equally reasonable? If we are confronted by two conflicting interpretations of some event can we only shrug and treat them as equally valid?

Consider the following hypothetical example of conflicting news reports:

(a) Ronald Smith, a science teacher at Oak Lane High School, lost his temper yesterday and threw a book at a student, 17-year-old David Jones, hitting him on the head. Jones has complained about Smith's behavior to the school principal, Marion Lee, but Lee has so far refused to take any action against Smith. Jones was unavailable for comment, but his friends say he is planning to charge Smith with assault. When contacted by reporters, Smith refused to answer questions and referred reporters to Mr. L. Rostock, Director of Education for the county Board of Education, also refused to comment on the incident.

(b) Ronald Smith, a science teacher at Oak Lane High School, was attacked yesterday by one of his students. The student, 17-year-old David Jones, had refused to stop laughing and talking in class despite repeated requests from Smith. When Smith ordered Jones to leave the room, Jones threw his text book at Smith, who caught it and tossed it back to Jones. Jones then stormed out of the room and left the school. When contacted, the school principal, Marion Lee, said she had interviewed both Smith and Jones, and that Jones had already apologized to Smith. She said she now regards the matter as closed.

These two accounts present quite different interpretations of the event. There are also certain factual discrepancies. Did Smith throw a book at Jones and hit his head? Or did Smith merely toss the book back to Jones after Jones had thrown it at Smith? Surely anyone who actually witnessed the event would be able to say which account is correct. After all, either the book actually hit Jones on the head, or it did not. Similarly, either Jones did in fact apologize to Smith, or he did not. Since it is the reporter's job to uncover the relevant facts the discrepancies between the two stories show that one of the reporters has failed to do his or her

job properly and has misreported the facts. But there is also a significant discrepancy in how the two accounts interpret the actions of the principal. The first account suggests that the principal is attempting to cover up the incident. The second account makes it appear that the principal acted appropriately. Which of these is the more reasonable interpretation? The information provided by the two accounts doesn't answer this question, but further investigation into the incident would likely make the answer clear. For example, would it be reasonable to interpret Smith's action of throwing or tossing the book to Jones as an assault? In some cases, observers might find it hard to say, but usually it will be obvious whether it really was a threatening action or not. These are all legitimate questions that arise out of the discrepancies between the two stories. Asking them is reasonable and natural. The answers to them will enable us to decide which story is closer to the truth, or which is the more reasonable interpretation. People who think that there is no way to decide between the two accounts (because all reporting is biased) are forced to view such questions as illegitimate. But this is surely just wrong. Further investigation will almost certainly favor one story or the other, or perhaps a third version combining elements from both. People who hold that there is no way to decide which story is more reasonable are in effect refusing to carry out further investigation. They have closed their minds to the possibility of further reasonable inquiry.

When dealing with conflicting accounts of an event, we are led to ask certain questions in order to decide which account is better. The fact that we ask these questions shows that we reject the suggestion that all interpretations are equal. We ask them because we believe that some interpretations are better (i. e., more reasonable, or more defensible, or closer to the truth) than others. And the questions we ask are of a type that should already be familiar to anyone with well developed critical thinking skills. For example, we asked whether certain factual statements were true, and whether other statements were relevant. These are both questions we need to ask when assessing arguments. This does not mean that news reports are actual arguments, but it does mean that we can use our critical thinking skills to assess them.

How to assess news reports

There are two primary purposes of news reports and the news media in general: (a) to describe some event to the reader, and (b) to persuade the reader to accept an interpretation of the event. We sometimes get so caught up in the factual descriptions that we forget about the second purpose of news reports. Journalists, however, are always aware of the need to present the factual description in a way that gives it a certain interpretation. For example, a story about a fire in a retirement home may highlight the narrow escapes of the residents and the heroism of the fire department, or it may focus on the failure of smoke alarms and

inadequate safety inspections. Both stories may include the same factual descriptions of the incident, but the interpretations will be different. The presence of the interpretive element does not mean that reporters and editors deliberately present a biased story. In most cases, they see what they are doing as presenting a responsible interpretation. If challenged to defend the content of a story they will usually claim that the facts are true and that their interpretation is a reasonable one. When we assess news coverage by news organizations (newspapers, magazines, radio and television stations), it is important to realize that there are these two different aspects — the factual and the interpretive — to consider because they are different they require different types of assessment.

Assessing factual claims

Descriptions in news reports consist of empirical truth claims. The factual truth of news reports is in practice relatively easy to assess because news reports are usually quite explicit in identifying the source of their factual claims. Reporters sometimes present their own eyewitness accounts, as when they describe a riot or flood that they have themselves witnessed. Sometimes they quote what witnesses have said about some event, as when they interview the victims of fraud. They may quote from official police reports. They may quote someone with relevant expertise. In each case the source of the information is identified so that the reporter can justify the claims made in the report. It is sometimes important to remind ourselves that when a reporter quotes witnesses or experts the reporter cannot guarantee the truth of what is said. Occasionally, we may suspect that a reporter may not be telling the truth, or may be deliberately attempting to create a misleading impression of the facts. However, most news organizations are careful to avoid publishing anything whose factual truth is in doubt. They believe, probably correctly, that if they are perceived as unreliable on factual matters their audience or readership will decline. This is why they are quick to publish corrections and apologies whenever they make a mistake and publish a false statement.

Normally we do not need to check the factual reliability of the news media with respect to particular news reports. But if we are concerned about the general reliability of a news organization there are certain questions we should ask. Does it have a reputation for carefully checking its factual claims? Does it apologize whenever it makes a factual error? If there are conflicting reports of an event by different news organizations is there internal evidence that would indicate which story is correct? When we have personal knowledge of an event being reported or background knowledge of a situation, does the report match our knowledge of the facts? Sometimes, however, a factual story may be so important to us that we will want to do some independent checking to determine whether the story is correct. This may present us with a difficult practical challenge for it may require us

to interview witnesses for ourselves, and to obtain documents and reports that may be difficult to obtain.

Assessing interpretive frameworks

Assessing interpretations presented in news stories is much more complex. The interpretive aspect of a news report needs to be understood in the context of the kind of interpretation that is present in the overall news coverage of a particular news organization. To understand the interpretation in a news story requires more than merely recognizing that a bias is present. For example, we need to know more than that the news organization dislikes the Prime Minister. We need to know what reasons they would give to explain or justify their hostility. This requires us to pay attention to the pattern of coverage and bias over a significant period of time. Is the hostility based on dislike of the Prime Minister's character and personal qualities? Or the government's policies? Or the inability to overcome government inefficiency? If we want to understand the interpretation being given to stories about the Prime Minister we need to know what reasons lie behind the hostility. What these reasons will reveal is an interpretive framework that influences and is present in all the coverage. This framework will always include a political perspective, sometimes including a commitment to a particular political party, but it extends far beyond the political sphere. It may, for example, include a view of the role of the arts, the value of amateur sport, support for certain educational policies, and concern about the role of organized religion in society. There are often subtle interconnections within an interpretive framework. It may be, for example, that although the hostility directed towards the Prime Minister is most evident with respect to certain personal qualities, it is the government's policies that underlie the hostility. The news organization may believe that the best way to undermine public support for the government's policies is not by attacking them directly but by ridiculing the Prime Minster's personal qualities. If we decide that the news organization is hostile to the government's policies, we need to understand which particular policies are disliked most strongly. Is it the government's support for NATO? Is it the refusal to introduce major tax cuts? Is it that the government is soft on crime, or hostile to minority rights, or that it treats certain regions of the country unfairly? Only when we can answer these questions will we really understand the interpretive framework that lies behind the interpretations given to particular stories.

Once we understand the interpretive framework in the coverage provided by a particular news organization, we are in a position to assess it. It may be that some of the Prime Minister's personal qualities are less than admirable, but if we are aware that news stories that focus on these personal qualities are part of an attempt to undermine public support for certain government policies, we will no longer regard these stories as innocuous. We will want to object that the Prime Minister's accent or clothes or protruding ears have nothing to do with any significant political

issue. It may be that the law deals too leniently with criminals, but we will want to know whether news reports that focus on crimes committed by repeat offenders really show a failure of government policy and precisely what that failure consists in. In short, we will want to use our own judgment to decide what we think is the most defensible social policy regarding the treatment of offenders, and on this basis decide whether we agree with the interpretation presented by a particular news organization. This is the kind of thing we must do for every element of the news organization's interpretive framework. We must identify each policy stance that is part of the interpretive framework and then decide for ourselves whether we agree with it or not.

Of course, an interpretive framework may not include a position on every controversial social and political issue. Sometimes a news organization is neutral with respect to certain issues. For example, it may be neutral on the question whether more government action is required to achieve significant reductions of greenhouse gas emissions. Such neutrality can sometime be deceptive, however, for while a news organization may be neutral on whether government action is needed it may have strong views on what the government should do if further action is needed. For example, it may insist that if further government action is needed it should only take the form of tax incentives to manufacturers. The neutrality may extend only to one specific aspect of an issue.

It would be a mistake to think that an interpretive framework must be accepted or rejected as a whole. There will likely be some coherence among the various elements that make up an interpretive framework, but this does not mean we cannot be selective in our judgments about the framework. We may, for example, agree with a news organization on matters of foreign policy and disagree with it on domestic policy issues. Or we may agree with it on the need to strengthen the role of religion and religious institutions in our society and disagree with it on the need for welfare reform.

Assignment 6b

Choose one (1) of the following sets of questions. Then, submit your answers to Canvas under Assignment 6b.

1. Find an article on a controversial topic. How strong are the arguments? Are there counterarguments that should be taken into account? Is it factual or fake news? Comment on the impact of the article. Submit in canvas.
2. Find Twitter tweets by a politician or celebrity. Do they

Note: The so-called "tabloid" press — weekly newspapers that are sold mainly in supermarket checkout aisles — feature two types of stories. (1) Bizarre stories about space aliens, two-headed babies, UFOs, and Elvis sightings. They are always

presented as true accounts and never acknowledge that there are good reasons to be skeptical about their claims. In many cases the claims are so outlandish that they could not possibly be true. (2) Reports of scandals involving Hollywood and pop music celebrities. These reports are often heavily criticized for violations of privacy and sleazy journalistic practices, and have led to many lawsuits from angry celebrities. They are frequently shown to be blatantly false or wild exaggerations.

Some people regard the tabloids as simple entertainment that is designed to amuse, rather than as serious attempts to report news. They think the tabloids are good for a laugh and that it is a mistake to criticize them. According to one media watcher, the usual criticisms of tabloids miss the point; the only legitimate criticism of a tabloid is when it isn't funny. But this is surely far too glib. It is true that some people buy tabloids just for their humor value. What ought to concern us, however, is their effect on those readers who think that the tabloids are reporting news. Surely for these readers the effect of a steady diet of tabloids must be to blunt their critical faculties and to encourage them to accept outrageous claims at face value. Instead of improving their ability to understand the world around them the tabloids make them more ignorant and more likely to listen to any demagogue who comes along. Not only are the tabloids an insult to human intelligence, they are a dangerous influence in our democratic society. No-one is suggesting that they should be banned but surely we should try to create a society in which the average citizen would be too embarrassed to buy a tabloid.

There is a bottom line in all this. Newspapers and television stations are subject to the constraints of the marketplace. If they cannot sell their product they will go out of business and their product will no longer be available for anyone. Giving the public what it wants is not only not reprehensible, it is actually a requirement of a free market society. It is healthy when newspapers and television shows compete for the public's attention. A society in which there is vigorous competition within the media is a society that is vibrant and alive. What the critics fail to recognize is that there is no realistic alternative to "pandering to the public's taste" through marketplace competition. The only way to remove the media from the competition of the marketplace would be to abolish private ownership. No sane person wants state ownership of the media.

FEEDBACK

Tap on the thumbnail above to leave feedback for your professor.

Chapter 7

Appendix

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Section 1

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